# **JABBERWOCK**

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

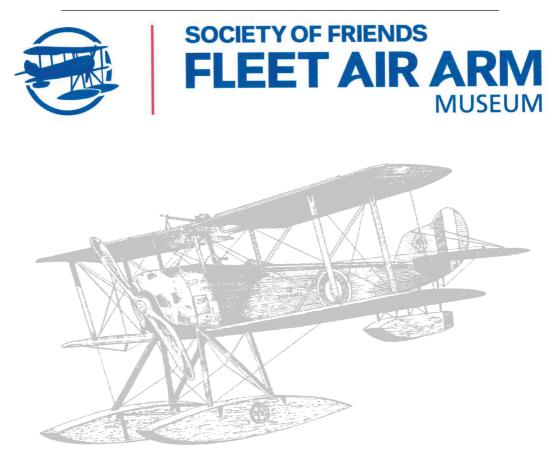
#### **IN THIS EDITION:**

- The FNHT Sea Vixen
- The Formation of the RNAS
- The Double Sunrise Service
- Tu 144 Concordski
- SOFFAAM Visit to the RAF Museum
- SOFFAAM Christmas lunch
- Tailpiece

#### **PLUS** ....

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

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#### 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 Museum Director and could be removed at any time.

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#### Cover picture:

Sea King Mk 5 of 771 Squadron exercising with the RNLI at Dartmouth in August 2014. 771 was the first naval air squadron to operate helicopters, when it received the Hoverfly in February 1945, operating this aircraft until May 1947. The squadron has operated a variety of aircraft since then, but today the Squadron only operates the Sea King HAR.5 in the grey and red colours, with nine permanently stationed at RNAS Culdrose to fulfil the Search and Rescue (SAR) function.

Photograph by Richard Hufton.

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### EDITORIAL

story of a long distance 162 "Volksjager". years ago. See the story on page 31. fleetairarmfriends.org.com.

application form for the SOFFAAM Meeting on 5 October. As required by Christmas lunch on Saturday 13 our Constitution, all Council members December. This is always a popular stand down and those who wish to event, so get your applications in early! serve for a further term put themselves

SOFFAAM another successful visit on 1 October, we had 16 nominees for 14 Council this time to the RAF Museum at places, so the Museum Director kindly Hendon. As you will see from the acted as teller for a formal ballot. As a picture on page 36, this visit was well result, we welcome new member lan supported and enjoyed by all. We MacKinnon to the Council. Minutes of learned that Hendon was originally a the AGM, including the full result of the RNAS station before being taken over ballot, are to be found on our website. by the RAF. The exhibits are housed in Robert Heath, our Membership truly cavernous World War 1 vintage Secretary, reports on page hangars. To take just a few examples of that our membership numbers are the staggering range of military aircraft holding steady at above 1,000. held by the Museum, heavy bombers For a Society like ours, these are including Lancaster and Vulcan stand gratifying figures, but they result from in the bomber hall, while the Battle of continuing recruitment efforts by Britain hall showed Brtish and German Robert and others. We can all help aircraft of the period. The Museum also by spreading the news of our varied holds what is believed to be the only range of activities and fund-raising complete example of the Ju-87G Stuka for the Fleet Air Arm Museum. as well as other rare German wartime

his issue contains an unusual jets, such as the Me 262 and the He

passenger service in wartime We publish the new monthly talks conditions. Provided by member Mic programme in this issue; our Talks Comber from his home in Portugal, Organiser, Rosanne, has once again this describes how Qantas operated lined up a varied cast of speakers Catalina aircraft to link Australia with from all walks of life. Those wishing to Ceylon after the fall of Singapore in book tickets (always advisable in view 1941. Mic was introduced to the story of the popularity of these events) can by David (Shorty) Hamilton, who was now take advantage of the interactive his C.O. in 899 but retired to Australia link on the Society's website at

Also in this issue, you will find the The Society held its Annual General members enjoyed up for re-election. Unusually this year,

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## LETTERS TO THE EDITOR

#### Dear Malcolm,

eith Leppard rolled back the years in his account of the Kilbolton Raid – I was an FDO in HMS *Searcher* and very much occupied while the raid was at its height – a sort of ringside seat. Shortly after the aircraft had landed on and we were heading back to Scapa Flow we received a signal, made to the Fleet, to "Splice the main brace" as the war in Europe was over.

Just one snag; another signal followed informing us that on arrival in Scapa we would assume the duty of guard ship. Fortunately the rum had been dealt with but we didn't get down to normal consumption of liquor until we had handed over to our 'relief' and reverted to normal routine. This included rather more than usual consumption of liquor plus the prospect of going in an easterly direction. By the time we got there it wasn't long before we spliced the main brace again it was all over and no guard ship was needed in Colombo or Trincomalee!

Best wishes, Freddie Greenop

#### Dear Sir,

am wondering if you have any members of the service on your records from 825 squadron at Culdrose and also disbanded on return from the Far East from HMS *Albion* in 1956. I was looking for any Pilot's Mates of the squadron. I and another member in Canada are trying to contact any of the group of at least 8. We know it is a long time back, but wondered if you were in contact with any members. We would appreciate any help you could give.

My regards, P R lliffe popsliffe@talktalk.net

Dear Malcolm,

irst, this system of emailing Jabberwock is excellent. Hope it saves money! A query if I may, as I don't know who else to ask. It has taken me many years to get around to this and is a question really. Let me explain. I joined in 1956 and did my twelve on Skyraiders, Venom, Vixen and finally Boscombe. It was an untypical service as I spent about three years away from normal RN environment. One of the reasons I went FAA is

the guy I used to work with/for in a small reinsurance broker in London. He never really spoke much about his service and I, stupidly, never asked him very much. Yes, it has taken me all these years to try to find more. His name was Patrick O'Mohr Mears and from wandering through the web it seems he joined as a Midshipman in 1939. In 1940 he was a Sub Lt (A) and two rings by 1942 when it seems he MAY have been awarded the DFC which seems unlikely, DFC in the RN? However I really have no idea if he was P or O. It is about time I found out more! What did he fly in for starters?

I don't think I am the only FAA character in Portugal but certainly no one in my area, which is north. I think there may be someone in Lisbon which is quite a hike. Thank goodness for email. I hear a lot from Shorty Hamilton, in Oz, who is writing his service story. May publish it he says, and as he sends me chapter by chapter I hope he does. Fortunately a cousin recorded and sent to me the recent TV programme on Winkle Brown and this spurred me into buying a book or two, just coming to the end of his one on Luftwaffe aircraft. Fascinating but then I guess you have already read it.

Anyway, keep up the good work.

Best regards Mic Comber A response by member Barrie Coad to the request from Mike Wilkinson in Jabberwock 76 for any information on Lt Noel Ferris RN:

#### Dear Malcolm,

he information obtained from the Cornish Guardian is as follows:

"The pilot of an aircraft [which crashed into the sea off Padstow on 22 February 19501 was rescued alive but later died in hospital, a post mortem examination, revealing that he died from drowning. Lt Ferris's aircraft nosedived into the sea outside the Camel estuary. He was picked up by a rescue launch within 20 minutes through the prompt action of the people who saw the crash from the shore. It was stated at the inquest that, although it was unusual. it was not impossible for a man to die from drowning some time after being taken out of the water. Mr R S Male. a volunteer coastguard at Polzeath. said he heard the engine of the plane splutter and cut out and saw the machine go into a vertical dive into the sea. Mr S Roberts. the coxswain of the naval rescue launch at Padstow. said he was guided to Lt Ferris by a Lancaster of Coastal Command from St Eval. While artificial respiration was being applied, Lt Ferris sat up and asked "Where am I?" The County Coroner, Mr E W Gill. recorded a verdict of cadial respiratory failure caused by the accidental crashing of Lt Ferris's plane into the sea."

The aircraft involved in this incident was Firefly FR1 DK532. I hope this information will be helpful to Mike Wilkinson.

#### Regards, Barrie Coad

#### Dear Malcolm,

couldn't resist the opportunity to snap the 16.45 'Torbay Express' excursion leaving Kingswear for Bristol Temple Meads on Sunday 14 September 2014.

#### **Richard Hufton**

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#### Dear Malcolm,

read with interest the letter (in Jabberwock August 2014) by John Slight about his part in servicing Mosquitos for use by the Fleet Air Arm. Whilst he is undoubtedly correct that some of the Mosquitos he serviced would have gone to 771 NAS; that was not the only unit to fly Mosquitos during 1947. All the following squadrons flew Mosquitos during 1947; 703, 728, 739, 762, 771, 772, 778, 790 and 811.

I have put together a listing, from Ray Sturtivant's book, "Fixed-Wing Aircraft of the Fleet Air Arm since 1946", showing the



"Bittern" is a Pacific 4-6-2 locomotive, built to the same design by Sir Nigel Gresley as the more famous A4 "Mallard", holder of the world speed record for steam locomotives. Photo R Hufton

aircraft with each unit. The ones he serviced will almost certainly be amongst them. I doubt that at this remove in time he has any records of which aircraft he worked on but if he does I'd be delighted to hear from him.



The Sea Mosquito with wings folded. Note the "thimble" radome. Although shown loaded with a torpedo, the Sea Mosquito did not see front line service.

#### Regards Dave Newnham

#### Dear Editor,

July 2014 marked the centenary of the Fleet Air Arm. formerly known as the Roval Naval Air Service. Overshadowed by the anniversaries of D-Day and the First World War, the FAA's 100th birthday has been forgotten by the media. Even my offered contributions have been unanswered. Eight months ago I undertook to write a paper (15,000 words) on 'The Formation of the Royal Naval Air Service and its role in WW1'. I have acquired some seventy books on the subject which has allowed me to become well conversant on the early years of British Naval Aviation.

I presented the paper (the only independent researcher) at the Global War Studies 2014 Conference held at Greenwich University last April.

I have since spoken at the Fleet Air Arm Association Reunion and hope to speak at a FAA Branch Dinner later this year. I attach three sections from my paper, so that I can impart some of the knowledge I have acquired. The main body of the paper covers the Royal Naval Air Service's role in WW1, the Navy's pioneer aviators and the development of the Aircraft Carrier.

I am prepared to give other talks on how the Royal Navy's Air Arm became, at the end of WW1, the world leader in Naval Aviation, producing the blue-print for the first aircraft carrier.

Happy 100th Birthday Fleet Air Arm

Regards Trevor Walhen Ex- FAA Engineer (1962-1986)

By the Editor: An edited version of Trevor's article on the formation of the RNAS appears on page 24 onwards.

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#### Dear Malcolm,

#### **HENLEY 2014**

he members of the Fleet. hold monthly get-togethers in UK and around the world, usually attended by a handful of ex aviators, AEOs and so on. The Henley `First of the Month', organised by Graham Hattam of the Thames Valley branch is a mammoth affair, this year some 126 souls. We meet in the extensive grounds of Phyllis Court, on the bank of the Thames, immediately opposite the finish of the Regatta races. Bowls is played on the many lawns and there is a covered walk. known as the Queen's Walk (though which Queen is not specified) running along the bank of the river. The house is elegant mock Palladian and was used as one of Eisenhower's Headquarters during the War.

## <u>Lunch is followed by</u> an address by a senior naval officer ....

A reception and lunch is followed by an address by a senior Naval officer, this year Rear Admiral Russ Harding (an Observer), Rear Admiral Fleet Air Arm and Assistant Chief of Naval Staff (Aviation and Carriers) - a weighty title for a man hardly taller than the lectern. He gave us a comprehensive briefing on the

current state of our replacement carriers and a forecast of what the future may hold. In all an optimistic view. Sue Eagles, Campaign Director of the Fly Navy Air Arm Officers' Association Heritage Trust, then told us about the work of the trust and gave us an update on the extensive, and expensive, repairs to the Sea Fury, damaged in a landing accident. We threw a pound or two into the buckets which came round, raising probably enough for a new tyre.

## <u>There were a goodly</u> number of former aviators present ...

Of course, there were a goodly number of former aviators present - Ron Davidson, ex Buccaneers then British Caledonian. David Eagles, ex Venoms and Sea Vixens [Fred's Five aerobatic team] and Buccaneers [Phoenix Five team] - later Chief Test Pilot of BAC Wharton, Tim Bolt, ex 890, 892 and 893. Nigel Anderdon and Charlie Dwarika (Senior P and SOBs of 892, Nigel then CO of 764 at Lossie and 892.)

All in all a very pleasant day, though the drive to and from the M3 up through Reading and back two days later, and westward on the A303 on a summer Friday was a bit of a bind, though maybe that's `cos l'm 81.

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#### Keith Chadbourn

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#### Membership Renewal

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.

## SNIPPETS FROM COUNCIL MEETINGS

#### From the September Meeting:

he meeting was held in the FAAM on 2 September 2014.

• *Minutes of previous meeting.* Outstanding items were discussed in the Secretary's report.

 The Chairman reported: Since his move to Dartmouth. he hoped he would not become an absentee chairman. He would continue to attend Council meetings and the AGM, but if the Council concluded that this would not be a satisfactory arrangement, it would be up to them to find an alternative. The Secretary commented that the post of Chairman, as for all the Officers of the Society, was open to re-election at every AGM. No other person had proposed him or herself for the position and speaking for himself, he hoped that Richard would stand again in October. These sentiments were warmly endorsed by the meeting. On the subject of the AGM, Richard asked if any of the present Council members wished to take the opportunity to stand down. None did. The Treasurer commented that two members, Willie Constantine and Ian McKinnon, had expressed a wish to stand. This meant that

there would be 16 candidates for 14 posts, thus we would have to hold a ballot. The Secretary undertook the action to prepare ballot papers.

• The Secretary reported:

He first circulated a draft version of the proposed SOFFAAM car sticker, explaining that the actual version would be approximately seven inches wide by 2 1/2 inches deep. He had obtained quotes for sufficient copies to send out to members with the Journal. The Council was generally unenthusiastic about this design and the potential cost. Gordon suggested that it could be displayed in Jabberwock to seek members' opinion.

The Secretary had circulated a proposed amendment to the SOFFAAM Constitution on the use of majority voting by postal or electronic means, which was generally supported. He had also proposed that paragraph 3b of the Constitution, referring to the provision of volunteers by SOFFAAM, should be deleted as being no longer relevant. The proposal was not carried and the Secretary accepted an action to propose an alternative form of words. The next step would be to seek formal approval to the revised Constitution at the AGM

#### Talks:

The Chairman said that we had had another very good year, with an average of 80 attendees at each talk and some very good speakers. We were still deciding on a speaker for the November talk.

#### • Visits:

Rosanne said she had received 38 applicants for the Hendon visit at present. Even if there were no more applicants, the visit will show a reasonable profit.

## • The Membership Secretary reported:

Overall membership has fallen by 17 since the May meeting. For the record, only 10 new applications have been received since that time. Of these, 1 is from 'Join' leaflets held by libraries, 4 downloaded from the web site, 5 are from the 'Join' leaflets in the FAAM. This represents the second worst year since 2008 for this period. It is not good news. The good news is that the proportion paying by standing order is increasing well.

I have started mailing posters to aviation orientated groups. Ralph Davies is very helpful in compiling the contact information. This will be a long process. I notice that my local library has now removed the "join" leaflets. Effort should be made to contact all of them again to re-display the leaflets. • The Editor reported:

Jabberwock 77 is now underway. He reminded the meeting of the editorial policy, that we would generally not publish members' obituaries. However, he had received two very impressive ones recently and it seemed a pity to ignore them. (This subject was addressed again in AOB.)

Malcolm had pleasure in presenting a signed copy of "Voices in Flight – the Royal Naval Air Service" to the Chairman.

Social:

In a discussion of the arrangements for the Christmas lunch, Richard proposed that the best solution would be to use the FAAM as in previous years, providing an acceptable date could be agreed. This proposal was carried unanimously. It was also agreed that raffle tickets would be sold separately from the lunch ticket.

#### • AOB:

Tracy Ufnowski thanked the Chairman for inviting her to the meeting, which she had found very interesting. She had already helped by updating the Society's website and looked forward to providing other help in the future. She also suggested that members' obituaries could be published on the website, a suggestion that was warmly received.

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#### **THE FNHT SEA VIXEN** With acknowledgements to the FNHT website



Sea Vixen FAW2 G-CVIX XP924 displays its graceful lines and immaculate finish as it arrives at Yeovilton on 16 September 2014

The Fly Navy Heritage Trust (FNHT) is delighted to announce that it has received a substantial transformational gift of a historic 1950s Royal Navy de Havilland Sea Vixen. The classic Fleet Air Arm fighter was formally handed over to the Fly Navy Heritage Trust by her former owner and Ambassador of the Fly Navy Heritage Trust, Julian Jones, at a spectacular presentation ceremony at Royal Naval Air Station Yeovilton on Tuesday 16 September 2014.

Sea Vixen FAW2 (Fighter all Weather) G-CVIX XP924, the only

flying Sea Vixen in the world, flew into RNAS Yeovilton in style, thrilling the waiting reception of guests with a poignant and emotional display. Unfortunately, she burst a tyre on landing but this did not deter the excitement of her homecoming or the enthusiasm of the welcome she received from the FNHT Sea Vixen Team and veterans who flew and maintained the aircraft when she had been in naval service.

The aircraft, painted in 899 Naval Air Squadron colours from HMS Eagle in 1971, and flown by a former 899 Naval Air Squadron pilot, Jonathon Whaley, was handed over by Julian Jones to Commodore Bill Covington CBE, the G-CVIX team leader for the Fly Navy Heritage Trust. Speaking at the handover ceremony, Commodore Covington said "We are going to keep G-CVIX flying. The Sea Vixen has a seminal place in the heart of the Fleet Air Arm. Today's presentation of the last flying Sea Vixen to the Fly Navy Heritage Trust, in partnership with the be part of our national naval aviation heritage for many years to come."

"In 1961, the year I was born" continued Julian Jones "Sea Vixens were patrolling the skies of the Arabian Gulf, maintaining peace and stability in the region and ensuring that oil flowed through the Straits of Hormuz to the Western world"

Also speaking at the handover ceremony, Rear Admiral Russ Harding

Heritage Trust, in Royal Navy, is an exceptional act of generosity, safeguarding the future of this iconic fighter for the benefit of the public and her loyal supporters."

In recent years G-CVIX, affectionately known as Foxy Lady, has been flown and operated by Bournemouth



Sea Vixen at rest. The "frangible" hatch over the observer's cockpit is open

based, DS Aviation, owned by Julian Jones, founder of Drilling Systems, a global provider of simulation technology to the oil and gas industry.

Speaking as he handed over two sets of ceremonial keys to the aircraft, Julian Jones said "It gives me great pleasure to know that G-CVIX has been returned to her home base at RNAS Yeovilton. I know she will have pride of place in the Fly Navy Heritage Trust collection and will continue to OBE, Head of the Fleet Air Arm and Assistant Chief of Naval Staff Aviation, Amphibious Capability and Carriers said "We are delighted that the Sea Vixen is returning to the Fleet Air Arm. She is a landmark aircraft in the Naval Aviation Heritage story and will be an important addition to the Fly Navy Heritage collection. We are extremely grateful to Julian Jones for his great generosity. His passion and sustained commitment to keeping the Sea Vixen flying over many years has saved a national treasure."

Rear Admiral Harding continued "The Sea Vixen flew on continuous



Former 899 Naval Air Squadron pilot, Jonathon Whaley,

and intensive operations throughout the 1960s and early 1970s at the height of the Cold War and represents the high speed strike aircraft of the 'jet age' of naval fixed wing carrier operations. She is a powerful and direct link with the Royal Navy's return to 'big deck' naval carrier operations with the two *Queen Elizabeth* class aircraft carriers and the Lightning II aircraft poised to enter service in the next few years."

Among those attending the ceremony was Admiral Sir Michael Layard KCB CBE, President of the Fly Navy Heritage Trust Sea Vixen Team and a former Commanding Officer of 899 Naval Air Squadron. "It has been a very special and historic day" said

Admiral Sir Michael. "Seeing C-VIX being flown so superbly in the safe and deft hands of Jonathon Whaley brought back many memories;

> especially of the many fine naval aviators who dave their lives in that most intensive era of naval flying. We don't under estimate the challenges of keeping such a magnificent and potent aircraft flying and we will rely greatly on our supporters, enthusiasts and the generosity of benefactors to raise the money needed to keep her in superb flving condition." The Sea Vixen

has displayed on four occasions in the last few weeks culminating in a classic Avon three aircraft display alongside a Hunter and Canberra at the Bournemouth Air Show last month. As part of the handover from its Bournemouth base to RNAS Yeovilton, the Sea Vixen also flew at RNAS Yeovilton on 12 September. It will be operated by Naval Aviation Ltd, a subsidiary of the Fly Navy Heritage Trust and after a period of winter maintenance will continue to fly at air shows and events around the country in 2015 as a signature aircraft in the Royal Navy's Heritage Collection.

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### **MONTHLY TALKS PROGRAMME - 2014**

Talks are held in the FAAM Auditorium on the last Thursday of each month at 19.30. Entry price is £5, 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.

> 27 November Richard Folkes and Andy Strachan Behind the scenes of 20/12 & Flight, Camera, Action

> > 29 January Colin Higgins The Dambuster Squadron

26 February Film night, presented by Barbara Gilbert More fascinating films from the archives

26 March Anthony Holt Flying helicopters from small ships

23 April Kim Sharman) The Royal Navy and the Battle of Britain

> 28 May Art Stacy The Goldfish Club

25 June Rod Dean Flying and displaying vintage aircraft

Programme correct at the time of printing

#### **RECENT MONTHLY TALKS** Summarised by Robert Heath

#### JULY TALK – 'The Kipper Fleet in to an operational Shackleton the Cold War – How an unlikely aircraft made a difference' by Wing Cdr Phil Burton AFC said. Well it did. Phil came to

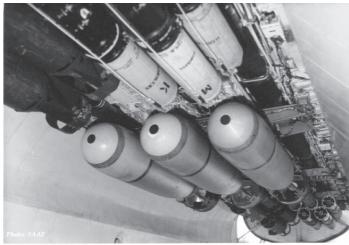
The time had come at last. All of Phil Burton's hard graft at RAF Cranwell was about to pay-off. He was now qualified to fulfil his ambition of flying powerful jets, Canberras to be exact. The posting was imminent. It arrived. Phil was to uphold the honour of Cranwell and replace one of three Cranwell to an operational Shackleton squadron! 'Don't worry, it will not affect your career' the man said. Well it did. Phil came to learn that as a Canberra, Vulcan, or whatever, pilot he would be trained to follow the book. As a Shackleton pilot however, you had to learn to be independent – Phil liked that.

The Shackleton entered service in 1951 as a Long Range Maritime Patrol Aircraft (LRMPA), with



The capacious 1952 Shackleton GR1, showing its World War 2 ancestry, including the anti-U boat 20mm gun turret.

pilots posted earlier and who had failed acceptance on to the squadron. Yes, it was a posting four RR Griffon engines with contra-rotating propellers (plus two Viper jets on the later Mk3). It had a chubby fuselage with lots of room for visual lookout, masses of electronics, radar, underwater detection systems, multiple weapons and a 2000+ mile range at 150kts for 15 hours. Its primary roles included antisubmarine (A/S), anti-surface ship reconnaissance, Search and Rescue, anti-piracy, etc. The Mk1 (tail wheel undercarriage) AUW (All Up Weight) was 80,000lbs and it carried 3,232 gallons of fuel. loop. The principal radar was the splendid and very capable ASV 21. Typical A/S patrols would be carried out at 1,000/1,200 feet and the likely target was a Schnorkel or a periscope, which could be detected at a range of 15/18 miles. To counter this, the Russian submarines would put up a device to listen for the aircraft search signals. The answer to that was to search intermittently, lift to 2,500/3,000ft, approach quietly by



pulling back the engine power, throw out the anchors and very quickly descend to 100ft on to the submarine before it was fullv aware of what was happening. The advent of Russian Alpha class nuclear submarines

The enormous weapons bay of the ASW variant, with a typical load of depth charges and homing torpedoes. In the SAR role, the Shackleton also carried a fully-equipped dinghy, which could be air-dropped to survivors.

The Mk3 (tricycle undercarriage) AUW was 108,00lbs, with 4,316 gallons and a crew of 15. As can be expected, the Mk1s and Mk2s with their tail wheels were a constant handful on the ground, eager to snatch every opportunity to weather-cock, or even more dramatic, to groundchanged the entire process – they moved through the search area too quickly. The bane of a Shackleton crew's life was the intelligence gathering ships, mostly trawlers. Eventually, satellites took over this thankless role. Phil also spent much time in the Far East on antiinsurgency patrols. Indonesia in



investigate. The US aircraft continued serenely on its course with no action taken. Phil was intrigued. Later, he was able to manipulate an opportunity

The AEW2 (1972 - 1990) with the APS 20 radar, whose operation owed a great deal to the aircrew of 849 Squadron and their AEW experience in the FAA.

to get close to the US

particular was active at sea and in the air. Mig 17s could be shaken off by out-turning them at slow speed, but P51 Mustangs were a lot more frightening. to the US that the intruder did not appear on the US screen at all. Why? It emerged that the US used very

Later came the Airborne Early Warning (AEW) requirement using the APS 20 radar taken from Gannet Mk 3s and installed in a massive bulge under the nose of the Shackleton - which displaced the nose-wheel. This necessitated reversion to tail wheel Shackletons! In this new role the Shackleton acted as an airborne control centre for fighter interceptions against Russian intelligence gathering 'Bears'. Among the many anecdotes from Phil, I was tickled by the one where Phil's aircraft was on patrol in the same area as a very upmarket US AEW aircraft. Phil's crew picked-up an intruder and sent off two Phantoms to

operation, where he discovered that the intruder did not appear on the US screen at all. Why? It emerged that the US used very clever computing to prioritise target acquisition. It was too clever. The list of priorities given reduced this type of target right 'off' the screen.

Ah, .... time to rethink priorities. Overall, the Shackleton was a joy to fly and the crew dedication and harmony stays fixed in Phil's memory. Likewise the close links and co-operation that developed with the Royal Navy. In total, 180 Shackletons were built and they operated from 1951 to 1992, with 22 squadrons based world-wide. It was a most absorbing tale and very well illustrated with these graceful aircraft. Thank you Phil for a very enjoyable evening.

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#### SEPTEMBER TALK – 'Unmanned Aircraft Systems' by Alec Ayliffe, QinetiQ

t is becoming quite commonplace now to see reference to unmanned drones being operated in one conflict (war!) zone or another by the US or UK forces. I always think they look a shade sinister. Where is the pilot? What is he looking at? Alec Ayliffe has been directly involved in the been there. Some argue that they have been around longer than manned aircraft, e.g. Sir George Cayley and John Stringfellow who both flew unmanned aircraft in the 19th century, albeit not remotely controlled.

## What is the correct word for them?

Which leads to terminology and definition; what is the correct word for them? Take your pick.



. In 1917.

The MQ-9 Reaper, a medium-level surveillance UAS used by US Forces

business of unmanned aircraft for 14 years, having earlier been a navigator on RAF Shackletons and Nimrods Mk 1 and Mk 2. Alec is now a Trials Officer at Boscombe Down with QinetiQ – previously largely known as the RAE (Royal Aircraft Establishment) before privatisation. Until quite recently little has been heard of UAs (Unmanned Aircraft), but they have always

the Royal Aircraft Factory developed an 'Aerial Torpedo' as an attempt to bring down Zeppelins bombing Britain. It crashed on launch, as did its successors. Later that year, the US Navy developed one that flew 1,000 yds initially. It then excelled itself by completely disappearing in the Florida Everglades, beyond radio control range. One of the important factors in successful progress was the development of gyroscopicallycontrolled autopilots, mainly by Bendix.

## Numerous projects came and went ...

Numerous projects came and went, but perhaps the best known

while the UK favoured the Australian 'Jindivik' which operated very successfully for 40 years – commonly over Aberporth. The next major development after gyroscopicallydriven autopilots was TRN (Terrain Referenced Navigation) and GPS (Global Positioning Systems). To date the RN has no tactical drones,



Two Ryan Firebee remotely-controlled target drones, carried under the wing of a USN C-130

UK unmanned aircraft was the 'Queen Bee' radio-controlled aerial target, based on the Tiger Moth. Between 1934 and 1943, 470 were built. A successor was planned and, retaining the 'bee' theme, was to be called a 'Drone' – which name stuck and became generic for unmanned aircraft. A prominent unmanned aircraft during the War was the V1 'Doodlebug' which strictly speaking was a remotely guided missile and not expected to be re-usable. Post-war, the US developed many drones such as the Ryan 'Firebee', whereas the US Navv has a variety of projects including stealth and armed drones. Typical UK military drones include the Meggitt Banshee (5,000 produced), Flight Refuelling Falconet, the Mirach, Midge, Phoenix and Watchkeeper. The latter are still in service. Another project under long term programme is 'Taranis' which is being developed by a consortium including BAE Systems, Rolls Royce

and QinetiQ. The RN was involved with the Boscombe Down Harrier, which landed under remote control on



Thales Watchkeeper UAS, deployed by the UK Army, with Viking Armoured vehicle

board a carrier at sea. The operation of unmanned air vehicles from ships is particularly affected by turbulence from ship structures and deck motion, plus the very dense electromagnetic environment experienced in warships.

## <u>There are still many</u> <u>problems to overcome</u> ...

As well as the US forces, the French, Russian and Chinese navies are known to be operating drones. All in all there are still many problems to be overcome with unmanned aircraft. We know they can be successfully operated over long distances (11 hour



A research Harrier carries out a fullyautomated approach and landing

flights). However, the systems are dependent on software and control depends on reliable communication, which is still an area of development. How do you regulate drones? The regulation itself is not a challenge, but safety is. The 'Rules of the Air' specify "see and avoid", but with drones it becomes "detect and avoid". The number of projects is growing and



Artist's impression of the stealthy UKdeveloped Taranis UAV

so are the applications. Google and Amazon are gaining much publicity with small 'Quadrocopters' being touted as delivery vehicles. Many UK Police Forces are introducing quite large Quadrocopters for surveillance. Likewise, many hobbvists are flying quite sophisticated versions, often fitted with cameras, leading to questions of public privacy. Many original ideas are coming from small private companies and Boeing, for example, is tapping into this by sponsoring several novel projects. Already Quadrocopters can maintain steady control in winds up to 35kts, which is mighty impressive. With all the development that has been going on guietly in the background, it is foreseeable that in the near future unmanned aircraft will not be the unusual novelty it is now.

Thank you Alec for a thought provoking talk about a topic that has always been with us, but very much in the background.

••••

#### THE FORMATION OF THE ROYAL NAVAL AIR SERVICE By Trevor Walhen

n 2009 the Royal Navy celebrated the centenary of Naval Aviation, although aviation first came to the attention of the Admiralty in 1908. On 21 July of that year Captain R. H. S. Bacon RN, Director of Naval Ordnance, proposed to Admiral Sir John Fisher, the First Sea Lord, that the Admiralty should consider the purchase of a rigid airship. This was in response to the threat of the German rigid

airships designed by Count Ferdinand von Zeppelin. Bacon also proposed that a Naval Air Assistant be added to the naval staff in the Admiralty, and that the War Office be asked to allow their Superintendent of Ballooning to be consulted by the Admiralty.

Fisher ensured

Government had recognised that the use of aircraft for military and naval purposes should be investigated.

## <u>Preparations were made</u> <u>for the construction of a</u> <u>rigid airship</u>

In due course the appointment of a Naval Air Assistant was approved; the War Office was asked to ensure close liaison between the balloon



His Majesty's short-lived Airship HMA-1 emerging from its floating shed on 24 September 1911.

the approval of the Admiralty Board to Bacon's proposals and their submission to the Committee of Imperial Defence (CID) which, along with an Advisory Committee for Aeronautics, had been established by the Prime Minister, Herbert Asquith. After deliberation, the factory at Farnborough and the Admiralty; and preparations were made for the construction of a rigid airship for the Navy. Captain Murray Sueter RN (who came to be known as the Father of the Fleet Air Arm) was appointed Inspecting Captain of Aircraft and head of the newly formed Air Section, with Lt. Oliver Schwann RN as his assistant. (Schwann later changed his name to the less Germanic-sounding Swann).

On 7 May 1909, the CID recommended the purchase of the proposed airship and Vickers, the warship contractor, was given the task of building it. Two years later, on 29 September 1911, His Majesty's Airship No 1 (HMA-1) was completed. The lengthy construction time led to HMA-1 being nicknamed "Mayfly" and this irreverent name proved to be justified, as after mooring trials in strong gusts of wind, it broke in two and was subsequently scrapped. It was another two years before the Admiralty ventured into balloons again, this time on a smaller scale. At the same time the air section at the Admiralty was disbanded and Captain Sueter and Commander Schwann returned to general duties.

The aircraft manufacturers, Short Brothers, had moved from Battersea to Shellbeach near Leysdown on the Isle of Sheppey in August 1909. Muswell Manor (known then as Mussel) a 16th century building close to Shellbeach, was purchased as the Aero Club's headquarters, the birthplace and cradle of British Aviation. However. Short Bros found the winds coming off the sea made flying difficult and early in 1910 they moved to the flying field at Eastchurch, where they built their first factory. On 15 February 1910 the Aero Club (which had also moved to Eastchurch) gained Royal patronage, with permission being granted by King George V to use the prefix 'Royal'. On 3 December 1910, one of the most important dates in Naval Aviation, the following announcement was made in the Royal Aero Club's magazine "Flight":

The Club's Offer to the Admiralty - The Committee of the Royal Aero Club has placed two aeroplanes at the disposal of the Admiralty for the use of Naval Officers at Sheerness and Chatham, at the



Designd by Horace Short and based on the successful Farman III pusher biplane, the Short S27 was the principal training aircraft in the early days at Eastchurch.

Club's flying grounds at Eastchurch, Isle of Sheppey. The machines are biplanes, fitted with Gnome motors. Several members have promised to assist in giving practical instruction to the officers.'

## <u>The donor was the</u> <u>wealthy Frank McClean</u>

The aircraft were owned by one of club's members who at first wanted

to stay anonymous. However, after a misleading press report, the Club identified the donor as the wealthy Frank McClean. The flying-ground at Eastchurch had been established at the end of 1909, when McClean

bought a large tract of land and leased it to the R.AeC for the peppercorn rent of one shilling per annum. The Admiralty thanked the Club for the offer, which was made known officially on 6 December in a general order issued by Admiral Sir Charles Drury, C-in-C at the Nore (Sheerness).

Frank McClean's generosity was not given much credit by Sueter, who gave him only one line in his book 'Airmen or Noah' - 'on machines kindly placed at the disposal of the Admiralty by Frank McClean, one of the keen pioneers of flight in this country'. Philip Jarrett's book 'Frank

McClean, Godfather to British Naval Aviation' published in 2011, gives an excellent account of McClean's offer to the Admiralty, going into great detail in the section 'Teaching the Navy and Army to Fly' where it states: '*Mr McClean's name will go down in history as the founder of our British Naval Air Fleet'*. Brad King in his book 'RNAS 1912-1918' also writes a good account. Referring to the first naval pilots' course and



The Avro Type D floatplane, in which Schwann became the first Briton to take off from water.

the navy's relations with Short Brothers, he ends by saying: *"Thus a connection with Eastchurch, the* Navy and the Shorts was cemented".

## <u>The applicants had to be</u> <u>unmarried and able to</u> <u>pay for their instruction</u>

The Admiralty invited applications to learn to fly from interested naval officers; they had to be unmarried and able to pay for their instruction costs. On 1 April 1911 four naval officers (out of 200 applicants) started flying training. The first three were naval Lieutenants Samson,

Longmore and Gregory. The fourth successful applicant was Lieutenant Gerrard of the Royal Marine Light Infantry (RMLI). Mr C.B. Cockburn, a member of the Roval Aero Club. offered his services as their instructor and all were awarded the Club's certificate by 2 May. The officers were also given a course on aircraft construction by Shorts Brothers. Lt Wildman-Lushington, who fell ill before the first course started, returned a year later and passed. (Incidentally, Wildman-Lushington gave Winston Churchill his first flying lessons.)

Lt. Longmore, after taking off from land, made a successful water landing in a Short S.27 pusher biplane, powered by a 70hp Gnome engine, on the River Medway. This was however, effectively a ditching of a wheeled aircraft, supported in the water by flotation bags, designed by Longmore and Oswald Short of Short Brothers.

## <u>Samson developed</u> <u>Eastchurch as a centre of</u> <u>excellence ...</u>



Lieutenant Arthur Longmore (in dark coat walking toward camera on right) on 1 December 1911 immediately after he became the first person in the UK to take off from land and make a successful water landing.

While Schwann was overseeing the construction of the airship, he saw that aeroplanes could be of use to the Navy. He acquired an Avro type D biplane; had it fitted with floats; and on 18 November 1911, succeeded in taking off from water, the first Briton to do so. Shortly after the event on 1 December, one of the original four Eastchurch graduates, After persuading the Admiralty that the first four naval aviators should stav at Eastchurch as instructors for future naval officers. Lt. Samson made it his business to develop Eastchurch as a centre of excellence for Naval Aviation. With the help of the R.AeC and the Short Brothers, he and fellow aviators developed the first naval air station. and founded the first Naval Flying School. The

Admiralty had purchased 10.5 acres of land on which to build the new school at Eastchurch and under Samson's command its role was significantly expanded. Experimental trials were commenced in wireless, bomb-dropping, aerial gunnery and night flying. Samson's passion for aviation was matched by Winston Churchill and Murray Sueter. Samson persuaded the Admiralty to purchase the two machines on loan from McClean and later stated that Churchill and Sueter together were the two people most responsible for anything the Navy did to help naval aviation before the war.

One of Shorts' earliest machines, No. 45, was a tractor (forward

twin floats and became Shorts' first successful seaplane. Two of these machines were delivered to the Admiralty in 1913 and provided the basis from which their 1914-18 war types were developed. In the same year, Shorts moved their seaplane factory to Rochester on the River Medway, which provided good

propeller) biplane with a Gnome 70 hp engine. An Admiralty version was built with a single large float and wing floats, which marked the



Short S27 positioned on the launching ramp on the forecastle of HMS Hibernia, shortly before the historic flight on 8 May 1912

beginning of Shorts' connection with marine aircraft. This machine was completed in 1912 with a Gnome 50 hp engine and re-numbered No. 38. The Admiralty's aircraft procurement policy in those early days was to set a budget for new aircraft, but no budget for repairs, with the result that when, as frequently happened, an aircraft was returned to Shorts for repair, it would be returned to service as a new 'Type'. This practice (and the lack of a coherent numbering system) makes tracking the various types operated by the RNAS very difficult. That year saw more experimental aircraft, one of which was No. 41, a tractor biplane with a Gnome 100 hp engine, first designed as a landplane. It was then given a Gnome 160 hp engine and

opportunities for testing floatplanes.

## <u>Samson made a</u> <u>successful ascent from</u> <u>HMS Africa</u>

Samson was keen to try out aircraft of different types, but always kept his eye on their adaptability for ship work. He persuaded the Admiralty to construct a platform over the bows of the battleship HMS *Africa,* and whilst anchored in Chatham Dockyard, using Longmore's Short S.27, Samson made a successful ascent on 1 December 1911, bringing the machine down safely on the sea alongside the ship. He carried out a second flight on 10 January 1912, following which he landed ashore at Eastchurch. On 8 May 1912. Lt. Samson became the first man in the world to fly off from a ship under way. The platform used on Africa was transferred to HMS Hibernia. Whilst the ship was steaming at more than 10 knots during the Fleet Review held at Weymouth; Samson took off in the Short S.27. a pusher biplane with a 70hp Gnome engine. He was to repeat this feat from the battleship HMS London two months later. on 4 July. Samson, now promoted Commander, flying with newly promoted Captain Gerrard RMLI and Lt Grey, demonstrated the use of aircraft for spotting submerged submarines and dropping bombs. The feats performed by the naval aviators during the King's review of his ships must have convinced the Naval authorities, if they needed any convincing, of the practical stage attained by aviation, and also that the Navy did not lack officers who were guite competent to rank with any aviators in the world.

On 13 April 1912 the King signed a royal warrant establishing the Royal Flying Corps (RFC) and on 19 June approved the establishment of a Central Flying School (CFS) at Upavon, under the control of the War Office. The King also approved an inspiring motto for the new Corps: *'Per Ardua ad Astra* – Through Struggles to the Stars'. The motto was adopted by the Royal Air Force when it was formed from the amalgamation of the RFC and the RNAS in April 1918. The RFC was intended to be a unified Corps, consisting of military and naval wings, but the Admiralty from the outset went its own way, keeping the naval training school at Eastchurch under Samson's command.

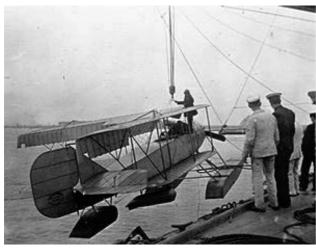
## The first Commandant of CFS was a naval officer ...

The first Commandant of the Central Flying School was a naval officer, Captain Godfrey Paine; the Assistant Commandant was Major Hugh Trenchard (later to become the first Chief of the Air Staff of the newly formed Air Ministry). Naval officers undertook their elementary flying training at Upavon, but it was at Eastchurch where they learnt the skills of naval flying, while at Calshot (near Southampton) they learnt to fly seaplanes. Some naval aviators had paid for private flying lessons before applying to join the naval wing of the RFC. Two such aviators were Sub Lt. Chris (Mad Major) Draper and Lt. Richard Bell Davies. The former learnt to fly as a civilian and the latter during service leave, both at the Grahame-White School at Hendon, which is now part of the RAF Museum at Hendon.

## <u>A chain of seaplane</u> <u>stations ...</u>

With the enthusiastic support of Churchill, himself a firm believer in the new weapon of air warfare, the Admiralty's Air Department planned a chain of seaplane stations along the east coast of Britain. By the end of 1912 the first was opened on the Isle of Grain in Kent. Others followed in 1913 at Felixstowe, Yarmouth, Calshot and two temporary stations in Scotland at Fort George and Fort Laing. During 1913, experiments were carried out at Eastchurch on the effects of dropping bombs at

the horizon. It was naval pilots who practised and evolved a workable method of bombing, who experimented with wireless transmitters in aircraft and who first attempted to fit machine-guns in aeroplanes. Their zeal and enthusiasm was backed up by an adventurous and far-seeing Winston Churchill, who is credited with the idea of folding-wings to reduce



A Short Folder seaplane being lowered into the water, where the wings would be spread preparatory to take-off. Unable to operate in any but the calmest seas, these little aircraft were operationally very limited.

space taken up by aircraft. This idea led to the development of the Short Folder aircraft with the help of Samson. Shorts incorporated folding wings in all their floatplanes including the Admiralty Type 184. entering the service in mid-1915 and became the Navy's workhorse two-seater for the rest of the war. In the 184, folding reduced the wingspan of 63ft to slightly more than 16ft. It became

varying heights and ascertaining the effect on the aircraft. It was shown that a 100 lb bomb containing 49 lb of explosives could be dropped from 350 ft without damage to the aircraft. Instruction and testing on seaplanes was undertaken at Calshot.

In the years 1912-13, naval aviation had come of age, fitting itself for war that was just beyond the first aircraft to sink a ship with a torpedo, and the only aircraft flown in the Battle of Jutland.

With the two Wings growing apart (looking after their own needs) the Admiralty saw the need for its independence, so on the 1 July 1914 the navy wing split from the RFC to form a new arm, the Royal Naval Air Service (RNAS), an event accepted as the Fleet Air Arm's official birth date. On this date the RNAS became (like the submarine service) a branch of the Royal Navy. The Admiralty Circular Letter that instigated the change said, in part:

"The Royal Naval Air Service, forming the Naval Wing of the Royal Flying Corps, will comprise all naval aircraft and personnel, either for active or reserve service, and will be administered by the Admiralty. It will consist of the Air Department, Admiralty; the Central Air Office; the Royal Naval Flying School; and the Royal Naval Air Stations."

The actual act of separation from the Royal Flying Corps did not take place until just over a year later on 1 August 1915 – shortly after Winston Churchill had left the Admiralty after the *debacle* of the attempted invasion of the Dardanelles. With the RNAS having now no direct organising links with the Military wing, the latter was now exclusively referred as the Royal Flying Corps (RFC).

## By July 1914, there were six naval air stations ...

By July 1914, there were six naval air stations, the flying school at Eastchurch and an airship section at Farnborough (still shared with the RFC until the RNAS assumed responsibility for all airships) and an active station at Kingsnorth on the River Medway, the first air station for both seaplanes and airships. The equipment inventory of the RNAS included 52 seaplanes

and flying boats, 39 landplanes and six airships as well as 128 officers and 700 men. More aircraft were on order as well as seven non-rigid airships. The construction of further air stations was also planned.

On 28 July 1914, at Calshot on Southampton Water, Longmore, now a Squadron Commander, made the first drop of a 14 inch torpedo from between the floats of a Short Folder seaplane. Of the original four graduates of Eastchurch, Longmore had the most successful military flying career. Transferring to the RAF on its formation in 1918; he eventually obtained the rank of Air Chief Marshal.

At Eastchurch. Samson was collecting a large assortment of aircraft from various British companies -Short Brothers, Sopwith, Royal Aircraft Factory and Bristol, they also included French aircraft – Farmans and a Blériot-type monoplane. Mostly fitted with the (French) Gnome engines but others included the Renault and Le Rhône, and were to take part in the Fleet Review – 18-22 July 1914, along with aircraft from the RNAS coastal air stations. On the last day, as the fleet filed past the Royal Yacht, Victoria and Albert, seventeen aircraft set out in single file from Calshot and flew past the Royal Yacht anchored at Spithead - the first fly-past.

After flying back to their bases, on 27 July they were put on a war footing. On 29 July orders were received at Eastchurch to the effect that aircraft were to confine themselves to protection duties rather than offensive action, but to be ready for any eventuality. Within a few days Britain was at war. A day after war began, the Cabinet informed the Admiralty that since nearly all of the RFC's aircraft were already earmarked for France and would inevitably accompany the Army when it fought abroad, the RNAS would have to take over the responsibility for the air defence of Great Britain, and these duties must take precedence over the purely naval requirements of scouting and patrol. The aircraft at Eastchurch were worse than useless. Not one had armament of any sort. Nevertheless, some attempt at air



The RNAS flew the first bombing raid of the war on 21 December 1914 when it attacked German positions around Ostend, Belgium in a Maurice Farman MF 11.

patrols was made, the pilot being armed with a service revolver and carrying as passenger a Royal Marine with a service rifle.

In his book "Fights and Flights", Samson said:

"After a period spent on the East Coast of England carrying out patrols against possible air attacks, my unit was ordered to proceed overseas to co-operate with a brigade of Royal Marines who were to occupy Ostend. My Squadron was composed practically in toto from the R.N. Flying School at Eastchurch. The majority of the pilots were Eastchurch officers and all the mechanics and working party were from the same unit – therefore my Squadron had the advantage of high esprit de corps".

## Samson took a collection of vehicles ...

As well as seven different types of aircraft with three different engine types, Samson took with him a collection of vehicles including ten

> touring cars, two five-ton Mercedes Lorries and eight London Omnibuses. On 27 August 1914, Samson's party, later officially designated No 3 Squadron RNAS, crossed the Channel with a Marine Brigade in HMS *Empress*. The aircraft, with no distinguishing marks except for a Union Jack lashed to their struts, flew across. Every pilot was encircled

with a couple of bicycle tyres acting as lifebelts and carried a .45 automatic pistol. In addition, some aircraft carried spare parts and tool kits. The *Empress* arrived the next morning. Without much knowledge of what lay ahead, but with a charismatic leader in command and filled with tremendous enthusiasm, a large part of the Royal Naval Air Service had deployed to War.

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#### **THE DOUBLE SUNRISE** Qantas' secret Perth-Ceylon wartime service

hen Singapore fell to Japan in February 1942 Australia lost its air connection to Britain. A new route was urgently needed. Hudson Fysh, co-founder of Qantas, wanted to establish a civilian service between Australia and Ceylon, despite the fact that at this time Japan had complete domination of the Indian Ocean, but civil aviation authorities ruled that this route was too dangerous to attempt. In 1943, at the urging of the British Government, the Royal Air Force in Britain supplied Qantas with five Catalina aircraft, if Qantas agreed to open a flying route from Perth to Ceylon (Sri Lanka). It was to be the world's longest regular non-stop service - a total distance of 5632km (3520 miles). The weight of fuel limited the Catalina's load to only three passengers and 69kg of diplomatic and armed forces mail. The flying boats travelled at 160 miles an hour.

Qantas Empire Airways began to operate the Catalina flying boats between Perth and Koggala Lake in Ceylon (Sri Lanka).This extraordinary, top secret, civilian service made 271 crossings of the Indian Ocean with no loss of life, continuing right through to the end of the war. In the process they delivered 860 high priority government and military passengers, large quantities of microfilmed mail,



A Quantas Catalina takes off on its regular non-stop service to Ceylon.

and urgent war-related freight – a major contribution to the war effort. These Catalinas were completely defenceless, carrying no weaponry, and with all armour plating removed so that the planes were sufficiently light to make the long crossing of more than 6480 km. In order to remain undetected by the Japanese, they flew by night using celestial navigation and without radio, except for a very brief midnight weather bulletin in Morse code.

The average length of the flights was 28 hours. Because the journey was made by night, the crew and passengers saw the sun rise twice, hence the name 'Double Sunrise' service. The Double Sunrise service still holds the record for the longest non-stop commercial air route and the record for the longest ever nonstop commercial flight – 32 hours 9 minutes. The last Double Sunrise flight departed from Sri Lanka for Perth on 17 July 1945.

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#### **CONCORDSKI** By Keith Chadbourn

The Soviet supersonic aircraft, the Tupolev Tu 144, first appeared at the Paris Air Show in 1971. Our own Concorde had appeared in 1969, soon after its first flight. The Tu 144 was next seen at the Hanover Air Show in 1972. Johnny Morton (who has just died aged 88) and I, who were demonstrating a Sea King and a Wasp small-ship helicopter, were invited, as were all participating said, "You give me." I demurred and he then said, "You no want be friends?" Later, we were invited to the shooting range in the basement. We arrived at the bottom of the cellar steps to find various drunken Russians waving rifles about and loosing off random rounds. We retreated.

Queuing at the barbecue later, John turned to me and asked if I'd noticed who was presiding over the



charcoal. In smart chef's hat stood Adolf Galland. former head of the Hitler's Fighter Command. He was the man who arranged safe passage for an aircraft to drop Bader's replacement leq, he

The Tu 144 supersonic transport, nicknamed "Concordski"

pilots, to dinner at the schloss which had been rented by Serge Sikorsky (son of Igor) for the duration of the show. There we met a number of Russians, who had little idea of how to behave. One, seeing my Westland-issued aircrew watch placed a meaty hand over it and having left one in his Spitfire when he baled out over northern France. Galland joined us at dinner later and turned out to be charming.

Also at our table was the jolly, slightly rotund Eduard Elyan, Chief Test Pilot of the Tu 144, dubbed the Russian Concorde, and his taciturn deputy, a lean and dislikeable man. Elvan soon made it plain that he was Georgian, not Russian, which drew a frown from another Russian who was obviously the Commissar sent to keep an eye on the Soviet contingent. Elyan told some very funny stories, drawing further looks of disapproval. John and I were invited to view the Tu 144 next day. Having looked around the outside, noting the tyres showing canvas, the scrape marks on the underside of the jet-pipes, the telemetry wiring encased in hand-sewn leather sleeves, we presented ourselves at the bottom of the steps. Taciturn co-pilot appeared at the top and when asked for Mr Elyan said, "He not here." Elyan then appeared and beckoned us up. Having seen Concorde's flight deck. I was somewhat taken aback to find four ejection seats in this one. The nose was much the same as Concorde. with a droop snoot, but when raised in supersonic flight there appeared to be no view.

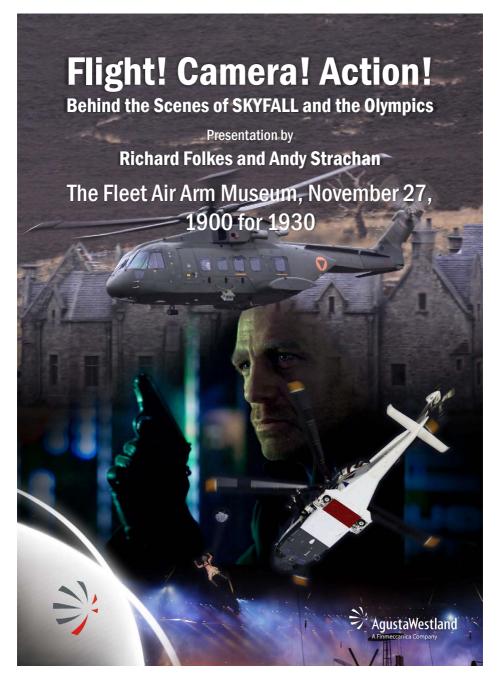
The co-pilot sat with me in the second set of seats and reluctantly explained, among other things, that there would be first, second and third class seating in the passenger cabin. I said I thought there were no classes in the Soviet Union, at which he glared and said, "What you say?" I thought it prudent to make no more feeble jokes and we sat in silence until it was my turn up front.

It was obvious from the presence of retracting canard wings just aft of the cockpit that there were low-speed handling problems. So it proved at Paris a year later when, trying to emulate Brian Trubshaw's manoeuvres in Concorde, the aircraft crashed, killing all on board and many on the ground. Elyan was not flying the aircraft. Prudently. BAC had modified one of the two Fairey Delta World Speed Record aircraft with an ogee wing, the shape of the future Concorde, to investigate low-speed handling. That aircraft. WG 777. is in the Museum.

When an engineer from BAC flew in the Tu 144 he remarked that even with the canards its landing speed was 178 knots compared with Concorde's 155. The Tu 144 did not last long in service - there were rumours that at least two were lost on operations, and it was taken out of service in 1983, having done only 55 passenger flights and 102 cargo. The Concorde crash in Paris in 2000 was not the fault of the aircraft and it remained in service until 2003, 27 years.

Just in passing, at that same Hanover Show I met a Uruguayan woman of German descent who remembered as a small girl seeing the Graf Spee in Montevideo harbour, while Exeter, Achilles and Ajax waited outside. By the way, in Spanish `Rio de la Plata' means Silver River. `Plate' is `plato'.

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The 42-strong team of SOFFAAM members assemble for a group photograph in the entrance to the Royal Air For enjoyed a splendid day out. The only complaint was that there was insufficient time to see every part of the ma closed for refurbishment, but the range of aircraft on



ce Museum, Hendon, on completion of our visit on 1 October 2014. We travelled by (brand new) luxury coach and ny exhibitions. Regrettably, the Grahame-White Factory, which contains aircraft of First World war vintage, was display was exceptional. Photograph by Ernest Lear.



Once again we shall be holding a Christmas lunch for SOFFAAM Members. The menu appears opposite on page 39. Would you please complete the application form below, and return your cheque for £21.50 made payable to SOFFAAM, to me by Saturday 22 November.

Please arrive at the Warneford Restaurant by 1200, lunch will be served at 1230. Wine or fruit juice will be served with the meal and is included in the price.

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

Mr Colin Hobbs has kindly agreed to give a talk in the Westland Auditorium, members and guest are very welcome to remain to listen to this talk after lunch.

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

Name Name of Guest(s) Address	
	( Not compulsory) e of menu by ticking the boxes:
Turkey Beef Bo	ourgignon Lasgne (V)
Christmas Pudding	Fruit Torte



## TAILPIECE

After every flight, UPS pilots fill out a form, called a "gripe sheet," which tells mechanics about problems with the aircraft. The mechanics correct the problems, document their repairs on the form, and then pilots review the gripe sheets before the next flight. Never let it be said that ground crews lack a sense of humour. Here are some actual maintenance complaints submitted by UPS pilots and the solutions recorded by maintenance engineers.

<ul> <li>Something loose in cockpit.</li> </ul>		
Something tightened in cockpit.		
Left-inside main tyre almost needs replacing.		
Almost replaced left-inside main tyre.		
• Unfamiliar noise coming from No2 engine.		
Engine ground-run for three hours - now sounds familiar.		
• Target radar hums.		
Reprogrammed target radar with lyrics		
• Number three engine missing.		
Engine found on starboard wing after brief search.		
• Aircraft handles funny.		
, Aircraft told to straighten up, fly right and be serious.		
Whining noise in cockpit on engine shutdown.		
Pilot removed from aircraft.		
<ul> <li>Noise coming from under instrument panel - sounds like a midget pounding on</li> </ul>		
something with a hammer.		
Took hammer away from midget.		
Suspected crack in windshield.		
Suspect you're right.		
• No2 ADF needle runs wild.		
Caught and tamed ADF needle.		
• Evidence of leak on right main landing gear.		
Evidence removed.		
• Three roaches in cabin.		
One roach killed, one wounded, one got away.		
• DME volume set unbelievably loud.		
DME volume set to more believable level.		
• Friction locks cause throttle levers to stick.		
That's what they are for.		

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ROYAL NAVY RESCUE

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