

# JABBERWOCK 105

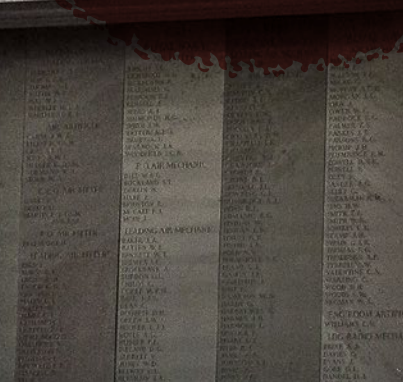


SOCIETY OF FRIENDS

**FLEET AIR ARM**  
MUSEUM

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

November  
2021



THESE  
OFFICERS AND MEN  
OF THE  
FLEET AIR ARM  
DIED IN THE SERVICE  
OF THEIR COUNTRY  
AND HAVE  
NO GRAVE  
BUT THE SEA

1939

1945

## IN THIS ISSUE

SoFFAAM Christmas Lunch • Frederick Joseph Rutland and his Albert Medal  
Indian Naval Air Arm Celebrations • A Naval fixed-wing pilot under pressure!  
Downwind of Daedalus • A Long Day in May • *Formidable* by name, formidable  
by nature • Farewell 'Tor' from a green Merlin • *Plus all the usual features etc.*

THE  
NATIONAL  
MUSEUM



# The Society of Friends of the Fleet Air Arm Museum



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---

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---

## LIFE VICE PRESIDENTS

Rear Admiral A R Rawbone CB, AFC, RN  
F C Ott DSC BSc (Econ)

Richard Hufton  
Bill Reeks

---

## CHAIRMAN

Graham Mottram  
shalefan@btinternet.com

---

## VICE CHAIRMAN

Ivan Childs  
ivan.childs@tiscali.co.uk

---

## TREASURER

Martin Turner  
martinturner111@yahoo.co.uk

---

## EVENTS ORGANISER

Rosanne Crowther  
T: 01935 822143  
rosannecrowther678@btinternet.com

---

## SECRETARY

Malcolm Smith  
smalcolm355@outlook.com

---

## TALKS COMMITTEE

Richard Macauley  
richard.macauley1@btinternet.com  
T: 01278 683300 M: 07768562976

---

## MEMBERSHIP SECRETARY

Simon Websper  
22 Kings Yard,  
Bishops Lydeard,  
Taunton, TA4 3LE.  
M: 07527 707204 T: 01823 433448  
soffaam.mem@gmail.com

---

## Gil Johnston

flyingflea@live.com.au

## Tim Smith

timsmith555@hotmail.co.uk

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## 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!

## ADMISSION

Members of SoFFAAM 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.

## FLEET AIR ARM MUSEUM

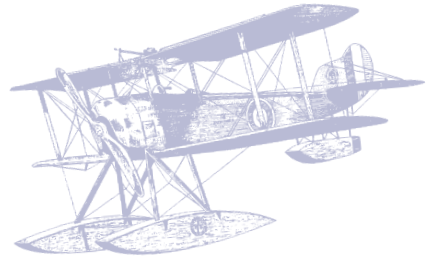
RNAS Yeovilton,  
Somerset BA22 8HT  
Telephone: 01935 840565

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## CONTACT THE SOCIETY

SOFFAAM email:  
[soffaam.mem@gmail.com](mailto:soffaam.mem@gmail.com)

SOFFAAM website:  
[www.fleetairarmfriends.org.uk](http://www.fleetairarmfriends.org.uk)



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## EDITOR

**Malcolm Smith**  
 T: 01935 478304 M: 07765 950806  
[smalcolm355@outlook.com](mailto:smalcolm355@outlook.com)

## DESIGN AND ARTWORK:

Richard Macauley

## PRINTED BY:

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 21 Ryelands Business Park  
 Bagley Road, Wellington  
 Somerset, TA21 9PZ

## COVER PHOTO

This is the Fleet Air Arm Memorial at Lee-on-Solent in Hampshire. It commemorates over 1,900 service personnel of the Fleet Air Arm who died across the globe and who have no known grave. It was officially inaugurated on 25 May 1953 by the Chief Commandant of the WRNS, HRH Duchess of Kent. It is administered by the CWGC.

# Editorial

**At our recent Council meeting, the Museum's General Manager reported: "FAAM has benefited from a positive summer, with visitor numbers consistently above expectations".**

Lockdown restrictions are being alleviated and it is with real pleasure that the Society has been able to invite members in October to the first live talk in the Museum for many months. As an experiment, this talk will be streamed live on Zoom. At the time of writing, your Council is planning to conduct the AGM, also a live event, in the Museum. Reports of both these events will appear in the next issue.

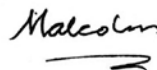
In this issue, we describe the bravery of Frederick Joseph Rutland in rescuing a sailor from the water in the aftermath of the Battle of Jutland. Rutland is more famous for being the only pilot to have been airborne during the battle. We have an article on the Indian Fleet Air Arm, which operates Russian-built Fulcrum jets from a completely redesigned aircraft carrier of Russian vintage. A new book is reviewed on United States Naval Aviation, from its pioneering years to the Second World War, and we have another in our occasional series "From the Archive".

We include a readers' questionnaire in this issue and invite all readers to

take the time to complete it. This is with the aim of understanding what attracts members to the Society and, if possible, gain some insight into measures that might encourage wider membership. The pandemic coincided with a falling-off of new membership, but we are seeing encouraging signs that this trend is being reversed.

Two Council members attended the Lee-on-Solent 'Lee Victory Festival' on 24-26 September. They took a publicity stand and aroused a significant level of interest in the Society, receiving donations and recruiting new members. Our newly redesigned website, together with our presence on Facebook, are other examples of the Society's publicity initiatives.

It sometimes comes as a surprise to those who took part in the Falklands conflict to be reminded that it is nearly 40 years since its conclusion. A major event next year will be the Society's celebration on 2 April, named "Falklands 40", which will include presentations by eminent speakers who were involved in the conflict. More details will appear in later issues.



Malcolm

# Letters to the editor

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## Hello Malcolm

My guess at the mystery aircraft in Steve Everitt's letter would be a Firefly Mk1...in-line engine, observer's cockpit glazing just visible and 2 cannon outboard of landing light... and unusual intake at wing root.

Maybe a super expert could identify the underwing serial!

Great edition as usual.. nice to see Charlton Horethorne featured... my father Jack, still going strong at 97, was stationed there with 804 Naval Air Squadron, Sea Hurricanes prior to Operation Torch aboard Dasher.

I also showed the Firefly picture to my father after my deliberations... he pondered for a couple of minutes and came up with... "its a Fairey Firefly, I think". Not bad for 97 years... obviously the FAA is hardwired into the brain!

## Best wishes

**Roger Colbeck**

**Life member SOFFAAM**

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## Malcolm

With reference to Steve Everitt's query on p.4 of Jabberwock 104, the aircraft is of course a Fairey Firefly F.I, as I am sure many people have told you by now. Part of the aircraft's serial is visible under the



Steve Everett's photo as it appeared in Jabberwock 104 and received a few comments.

wing: xT79x so I think its identity is one of DT974, DT975 or DT976, which were the only Fireflies in the DT97x series still in service after January 1946 (source: FAA Fixed Wing Aircraft since 1946 by Sturtivant, Burrow & Howard). However I cannot in all conscience make out the final digit.

**Regards,**

**Nick Carlyon**

---

## Hi Malcolm,

I've had my eJabberwock for a few days now, but still not fully read it.

A few comments on this edition if I may, however, not my area of 'expertise' but at least my library gets a work out.

The photo on page 4 is a Fairey



Firefly F.1 – the air intake and gun fairings are a bit of a giveaway.

The Westland Wyvern on the cover and the article within, I always had a bit of a soft spot for the beast! The photo on page 24 – *Eagle* it is but after Suez.

830 Squadron was on *Eagle* during the Suez Crisis. The squadron marking in the photo (on VZ749 I believe) shows Dennis The Menace (of The Beano fame) riding a bomb with marked 813.

813 Squadron was aboard *Eagle* from July 1957 to March 1958. My books say it was the last operational Wyvern squadron.

Lurking in the background of the photo is one of 849 Squadron's Skyraider AEW.1 aircraft.

That said, the colour photos are great... any more?

## **Cheers**

**Ian Burns**

## **Editors Note:**

Thank you for the corrections Ian and if anyone has photos of the Westland Wyvern in their personal collections, please get in touch as we would be very happy to publish them.

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## **Dear Malcolm**

Two comments to make on the last issue:

1) The aircraft in the picture on page 4 is a Firefly 1 or 2, an early mark with the radiator under the nose and therefore invisible, a mark I became very familiar with in Australia in 1945-1946. A determined searcher may be able to

identify the exact aircraft by the serial numbers on the underside of the wing.

2) The DH.98 Mosquito talk. I think Robert Heath may have been confused over the basis of production of these aircraft. The two prototypes, W4050 and W4052 were both assembled at Salisbury Hall. The first was dismantled, taken to Hatfield by road and re-assembled in the factory; it was first flown there by Geoffrey de Havilland on 25th November 1940. Geoffrey challenged the men at Salisbury Hall to prepare a field at the back of the hangar to enable him to fly W4052 from there, thereby saving the two months which it would take to dismantle the aircraft and re-assemble it in the factory. This was done and even though the take-off run available was no more than 450 yards, Geoffrey took off successfully and flew across to Hatfield on 15th May 1941. No more Mosquitos were built at Salisbury Hall. Records show that 3,349 Mosquito variants were built at Hatfield. I was an ex-Service Tech. School student in the factory in 1947 when a short run of Mosquito T.3 went through for the Royal Navy.

**Regards,**

**Hugh Langrishe**

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## **Dear Malcolm**

While attending the Lee Victory Festival, I paid my respects at the Fleet Air Arm memorial which looks out over the Solent towards the Isle of Wight. I also took photos for use on the front cover of this edition of *Jabberwock*.

While doing so, my colleague and I were commenting on the crest (detail photo to the right) and we discussed the origins of the elements portrayed and wondered why the 'wreath' also has Oak leaves for the right hand side.

I'm sure our members will be able to shed some light on the origins of these elements and why they were chosen - 'Hearts of Oak' perhaps?

**Regards,  
Richard Macauley**



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### Dear Malcolm

Another question from me if I may addressed to the Membership.

An acquaintance of mine mentioned a conversation he had with an ex RAF pilot who said he was involved "in combat" during the Viet Nam war and "tangled with Migs".

We discussed this at length and came up with a few different scenarios as to 'if' or 'how' this could have happened. I am not aware of any British personnel directly involved officially in the Viet Nam war but maybe our members know better?

Gp Capt Jock Heron, who has given a

Talk to our Society mentions in his book that while on exchange with the USAF, he assisted in ferrying F-105s from the US to the Far East but as he wasn't allowed to overfly Viet Nam, he stopped short at Clark AB with an American pilot continuing the ferry to Thailand.

Apologies that these observations are all RAF/USAF but given the extensive membership of SoFFAAM, I hope they can forgive me asking for comments.

**Regards,  
Richard Macauley**

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### Dear Editor

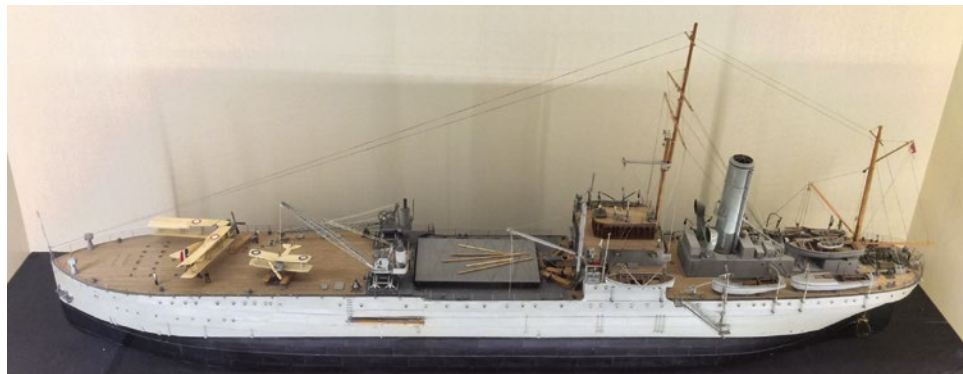
I'd like to thank Chris Howat, Peter Cowlan and Jim Humberstone for their recent insightful articles on early British carrier developments. The Museum is home to some wonderful scale models though that of HMS *Ark Royal* pictured is a bit hidden away.

The recent announcement of the new AUKUS Australia/UK/USA defence treaty is a reminder that Royal Navy/Royal Australian Navy ties have been strong since the Great War and will now only grow stronger. Back In 1914 the Australian shipping company

Huddart Parker was having its new passenger ferry *Nairana* built on the Clyde. After the outbreak of war it was converted to operate wheeled aircraft from a forward 95ft flying-off deck and had a hangar aft for seaplanes to be craned into the water. In August 1917 she was commissioned as the Royal

Naval Air Service seaplane carrier HMS *Nairana*. War service over, the ship was returned to her Aussie owners in 1921 and she spent the next 27 years plying the Tasmania-Melbourne ferry route

**Chris Penney**  
**Member 3474**

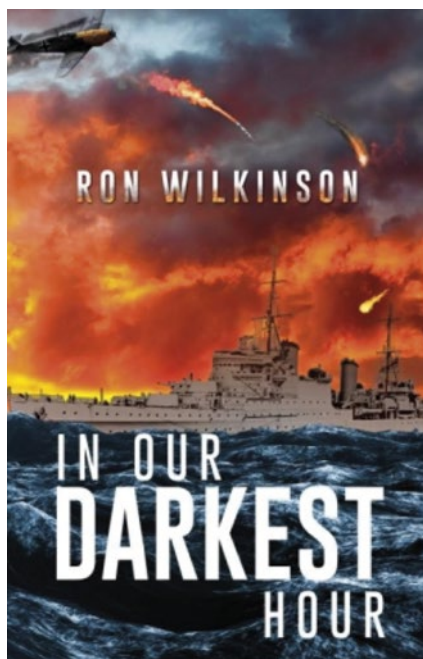


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### Dear Editor

I have been a SoFFAAM Member for too many years to remember, my membership number is 522. I was wondering if I could make a small announcement in the letters to the editor page in Jabberwock. I have written a novel about a fictional 'Town' class cruiser, HMS Preston, involved in historical events in WWII. It does include passages involving Walrus aircraft and their crews, again fictional.

This is the first of three novels, that I am writing. However, books two and three have a lot more FAA involvement. The book is called 'In our Darkest Hour' ISBN 9781800161016 written under my own name Ron Wilkinson. Available at Waterstones, Amazon etc.





# SoFFAAM Christmas Lunch

**At Long Sutton Golf Club, Long Load, Langport, Somerset TA10 9JU on Saturday 15 January 2022.**

The Christmas lunch will be held on **Saturday 15 January, 2022** for SOFFAAM Members and guests. The menu appears below. Kindly complete the application form overleaf or download from the SoFFAAM website and send your cheque for **£21.00** per person (This does not include wine. All drinks can be purchased as required from the bar).

Cheques to be made payable to **SoFFAAM**, and to be received by the organiser by **Saturday 18th December**. Please post to: Mrs Rosanne Crowther, St David's, 5, Church Close, Martock, Somerset, TA12 6DS.

Please arrive at Long Sutton Golf Club by **12:00**; lunch will be served at **12:30**. Acknowledgements will not be sent, however, should the demand exceed the maximum seating at Long Sutton Golf Club, you will be advised accordingly.

Complimentary glass of Mulled Wine or Orange Juice on arrival



A choice of one of the following for main course

Roast Turkey

*Served with pigs in blankets, pork and cranberry stuffing, crispy roast potatoes and seasonal vegetables*

Rump of Beef

*In a red wine jus with crispy roast potatoes and seasonal vegetables*

Butternut squash, spinach & Feta cheese

*In a red wine jus with crispy roast potatoes and seasonal vegetables*



A choice of one of the following for dessert

Classic Christmas Pudding with a Brandy Sauce or Custard

Profiteroles drizzled with chocolate sauce

Duo of local cheeses, served with caramelised onion chutney, biscuits & grapes



Followed by Coffee and Mince Pies

**We look forward to seeing old and new members and guests**

# SoFFAAM Christmas Lunch attendance form

at Long Sutton Golf Club, Long Load, Langport, Somerset TA10 9JU on  
Saturday 15 January, 2022.

Please Note - this form can be downloaded from the home page of the SoFFAAM website

Name \_\_\_\_\_

Name of Guest(s) \_\_\_\_\_

\_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Postcode \_\_\_\_\_

Tel Number(s) \_\_\_\_\_

Please tick your choice of menu and add quantities if including guests

Roast Turkey  Quantity

Rump of Beef  Quantity

Butternut squash, spinach & Feta cheese  Quantity

Xmas Pudding & brandy sauce  Quantity

Profiteroles with chocolate sauce  Quantity

Duo of cheeses, onion chutney, biscuits & grapes  Quantity

Please return your cheque for **£21.00** per person no later than **Saturday 18th December**,  
to Mrs Rosanne Crowther, St David's, 5, Church Close, Martock, Somerset, TA12 6DS.

Kindly note no refunds will be offered unless agreed by the Chairman.

# Council snippets

## From the September 2021 Council Meeting

**FAAM has benefited from a very positive summer, with visitor numbers consistently above expectations.**

Google Review and Trip Advisor are good examples of the Museum getting daily positive reviews that praise our visitor experience but also that we have maintained good control measures without being restrictive. The Museum has now launched the initial tender for the Carrier upgrade, due in 2022. The initial upgrade will challenge tenderers to refurbish and re-interpret the Arrival Corridor, Helicopter Transfer, Island Tour and Experience Chamber.

The Society's Zoom talks have continued to go well. With the impending talks in October and November being 'in person' as well as being broadcast on Zoom, we have some challenges to confirm as workable at the Museum on the night. These must also be resolved in a manner that satisfies our hosts FAAM and caters for their ongoing Covid precautions. Advertising the talks could still be better, with the limited success of Facebook proving this is a medium we

should try a lot harder with, as well as the more traditional means. We continue to advertise tickets on the website and from links in the promotional emails and we hope to reinstate the FAAM portal for Talks purchase. Payments currently accepted are by PayPal, BACS and cheque and progress is also being made with a contactless facility.

New membership applications really took off in August. Life memberships continue to be popular, with an increase of seven since June. Of the 15 new applications received since the June meeting, 3 were referrals/gifts from existing SoFFAAM members, 2 came from our website, 4 were through museum visits and 6 came from visits to the FAAM website. The number of members switching to electronic Jabberwock is creeping up very slowly.

The revised website design is now finished and has replaced the previous version. We are still working on the Members' Area, which will have the back catalogue of digitised Jabberwocks available via a password.



# Frederick Joseph Rutland and his Albert Medal

By Graham Mottram



Frederick Joseph Rutland.

**Frederick Joseph Rutland was born in Weymouth on 10 September 1885 and joined the Royal Navy as a Boy Second Class in January 1901 in Portsmouth.**

He signed up for 12 years on his 18th birthday in 1903. He was rated Petty Officer in May 1912 and in September was "selected to undergo special training with a view to promotion to Commissioned Rank". After completing professional courses with excellent results he was promoted to Sub Lieutenant in December 1913. In 1914 he applied for flying training and went to Eastchurch in December. Rutland gained

his RAeC ticket, 1053, on 26 January 1915. He converted on to seaplanes at Calshot and then joined HMS *Engadine* in March 1915. SS *Engadine* was a fast steam packet for the SE&C Railway's Channel crossings, modified for RN service with a permanent hangar at the stern. Rutland joined as one of the pilots for her Short 184 seaplanes at Rosyth in March 1915.

Rutland impressed his Captain, Lt Cdr C G Robinson, who recommended him for promotion in December 1915. Robinson reported at the end of May 1916 that Rutland "Is the senior Flying officer in the ship and works with great tact. Has taken great pains in teaching pilots and observers W/T [and] ... in working out and bringing forward small improvements in seaplanes and service matters."

When Admiral Beatty's Battlecruiser Fleet (BCF) deployed from Rosyth to rendezvous in the North Sea with Jellicoe's Battlefleet on 31 May 1916 for what became the Battle of Jutland, it should have been accompanied by two seaplane carriers, HMS *Engadine* and *Campania*. Their role was to provide airborne reconnaissance ahead of the battlecruisers. *Campania* failed to

receive the original signal but sailed some two hours behind the main force. However, she had no escort and was ordered back to harbour. It would fall to *Engadine*, Rutland and his observer, Assistant Paymaster George Trewin, to be the first air element to take part in a major naval battle. Rutland's aircraft was the fourth aircraft built by Westland, Short Type 184 8359. In the early afternoon of May 31 HMS *Galatea*, scouting for Beatty's battlecruisers, reported smoke just above the horizon. Beatty ordered an air reconnaissance and *Engadine* succeeded in launching 8359 in a little under 30 minutes, a feat rarely achieved in under 20 in a calm harbour, never mind the North Sea. Flying at 900 feet, Rutland came within 3,000 yards of a group of German light cruisers who opened up on him. Trewin wirelessly back the size, position and course of the German flotilla and his signals were received in *Engadine*. In the signals chaos that was one of the controversial aspects of the battle, Trewin's relayed reports were never received in the flagship. On their return flight, the engine stopped from lack of fuel and Rutland had to alight on the sea. His technical skills soon diagnosed

a broken petrol pipe, which he repaired and when Trewin asked for further orders, the airmen were astonished to be told to taxi back to their carrier.

*Engadine* stayed in contact with the battlecruisers and in the early evening took in tow the armoured cruiser HMS *Warrior*, which had been badly damaged and was taking water. By the next morning it was clear that *Warrior* was unable to survive the long tow back to Scotland and *Engadine* came alongside and began to transfer *Warrior*'s crew. The sea was choppy and the two ships were alternately closing and parting, their hulls grinding together with a deafening noise. Parties of men on both decks were handling stretchers along the decks when the event began which led to Rutland's Albert Medal award. Rutland wrote his own account of the rescue some time later,

*"The last stretcher was being passed when the wounded man slipped out of it and fell into the sea between the two ships.....but the Captain shouted that no one was to go over the side. He had fetched up on a bundle of hazelwood stakes, the remains of a fender, and for the moment they supported him. But it seemed that it would be only a matter*



**HMS Warrior.**



**HMS Engadine.**





Short 184 seaplane © IWM

*of seconds before he fell through. So I decided that nothing could be done and went on helping the wounded, of whom there were nearly 100 to be placed in shelter.... I ran forward and saw that, though still between the ships, he had drifted far enough ahead to be rescued without any real risk. So I grabbed a rope with a bowline in it, with which two men had been trying to lasso him, told them and others to hang onto the end, went down the rope, swam to the man, brought him to the rope, put myself into the bowline, and holding him in my arms, ordered those on deck to heave away. There was one tricky moment when we were nearly up to the deck and I saw the steel hawser from Warrior's bows cutting across my rope. Had the hawser parted at the wrong moment it could have cut us both in two.*

*After all, the poor fellow died of his wounds. He had been very seriously wounded and it was apparently known that he had only a short time to live. As for myself I had never been in danger, except from the steel hawser, for I had weighed up the situation in a second*

*before going over the side."*

The Captain of *Warrior* thought differently and made a passionate public speech of thanks to Rutland once back in harbour, later making the official recommendation that resulted in the award of the Albert Medal in Gold. The citation, gazetted on 11 August 1916, read,

*"During the transshipment of the crew of H.M.S. "Warrior" to H.M.S. "Engadine" on the morning of the 1st of June 1916, succeeding the naval battle off the coast of Jutland, one of the severely wounded, owing to the violent motion of the two ships, was accidentally dropped overboard from a stretcher and fell between the ships. As the ships were working most dangerously, the Commanding Officer of the "Warrior" had to forbid two of his officers from jumping overboard to the rescue of the wounded man, as he considered that it would mean their almost certain death. Before he could be observed, however, Lieutenant Rutland, of H.M.S. "Engadine," went overboard from the forepart of that ship with a bowline and worked himself aft. He succeeded in putting the bowline around the wounded man and in getting him hauled on board, but it was then found that the man was dead, having been crushed between the two ships. Lieutenant Rutland's escape from a similar fate was miraculous. His bravery is reported to have been magnificent."*

When Rutland received the Albert Medal in Gold, he was the only man who had ever worn it on a naval jacket.



'Jabberwock' within the Fleet Air Arm Museum. This picture demonstrates the rocket armament used against Zeppelins © Richard Macauley

All the previous ones had been awarded posthumously. He was also awarded the DSC for his flight at Jutland.

His exploits were not yet over. In November 1916 he went from *Engadine* to *Manxman*, (another converted Channel ferry) and from there in July 1917 to *Nairana* on that ship's commissioning. From *Manxman* he attempted an anti-Zeppelin patrol in a rocket armed Sopwith Pup but, in dreadful weather, ran out of fuel and force landed off the coast of Denmark. He avoided internment and returned home to further assist in the development of flying from turret ramps, taking off from *Yarmouth* in June 1917 and from *Repulse* in October. He received a Bar to his DSC and official commendations from Their Lordships for this pioneering work. His final naval appointment was Senior Flying Officer in HMS *Furious*, from 21 August 1917, replacing Edwin Dunning who had been

killed after his series of historic landings two weeks earlier. He transferred to the RAF in April 1918 and ended the war as a Major RAF, being granted a Permanent Commission in August 1919.

He resigned his commission in 1923 and moved to Japan, where he was employed in advising the Japanese Navy on naval aviation. In 1928, he moved back to the UK, but retained links with the Japanese. He went to the USA, where he established a business that was alleged by the FBI to be a cover for espionage on behalf of the Japanese. In particular, it was alleged that he provided US classified information that supported the development of the Japanese naval air arm. He returned to the UK in 1941, where MI6 had been informed by the FBI of their suspicions. He was briefly interned "for reasons of hostile associations" but never charged with espionage. Sadly, he committed suicide in 1949.

# Indian Naval Air Arm Celebrations

By Chris Penney

India marked its 75th Anniversary of Independence from the UK on 15 August 2021 and Indian Naval Aviation celebrated several historic anniversaries during the year.

The Indian Navy's air arm was formed in 1951 with the acquisition of British Short Sealand flying boats that

flew from the southern port city of Kochi (Cochin) in Kerala state. Today Kochi is headquarters of Southern Command, a large naval establishment housing Flag Officer Sea Training (FOST), an Anti-Submarine Warfare school, an Aircraft Yard and has two Naval Air Stations under its jurisdiction: INS Garuda and



Indian Naval Air Squadron 300 Sea Harriers (note the white tiger squadron logo on the nose), formation flying with UK Joint Force GR7 Harriers with 26A wearing Royal Navy 800 Naval Air Squadron markings.

INS Rajali.

Indian Naval Air Squadron (INAS) 561, also known as the Navy's Helicopter Training School (HTS), held its Golden Jubilee at INS Rajali, Arakkonam, in September. The occasion was marked with a station parade and rotary formation flypast. The HTS is the equivalent of RAF Shawbury, undertaking basic ab-initio flying for both the Navy and Coastguard using the indigenous but ageing HAL Chetak. A licence-built French Alouette III, the design dates from the 1950s and it is now 60 years since the induction of Chetaks into naval service. As part of the anniversary a preserved example was placed on display atop a plinth.

Situated in Tamil Nadu state, INS Rajali was built during the Second World War. It has the longest runway in the country and is also home to India's expanding force of Boeing P-8 ASW maritime patrol jets. Options for a naval Chetak replacement, both for elementary pilot training and ships' flights, are being investigated. Bengaluru-based HAL have designed the Dhruv (ALH Mk III) 14-seat helicopter which is already in widespread service with other branches

of the Indian military. The Navy is still considering the type's suitability for ship deployment.

INAS 330 celebrated its Golden Jubilee in April. Resident at the main naval shipbuilding port of Mumbai, it operates the Westland Sea King Mk 42B in the Anti-Submarine role. Since 1971 the Squadron has flown three variants of the Sea King, namely Mk 42, Mk 42A and Mk 42B, and has the rare distinction of operating from all three aircraft carriers of the Indian Navy. All the Sea Kings were built at Yeovil and transported by sea to India where they were reassembled and test flown. Unlike the Royal Navy, which replaced the Sea King with Merlin, the Indian Navy is starting to introduce the US-built Seahawk MH-60R to supplement and almost certainly supersede the Sea King. This is the same version operated by the Royal Australian Navy's Fleet Air Arm with whom the Indian Navy has ongoing defence ties.

This year has also seen Western Naval Command's celebration of INS Hansa's diamond jubilee on 5 September 2021. Dabolim Naval Air Station as it is known locally, is in Goa state on



Sea Hawk at RAF Sharjah. © Ray Deacon



Fairey Firefly preserved at Goa's Museum





Two former Fleet Requirement Unit-operated Sea Hawk FGA.6s transited through RAF Sharjah en-route to their new home at Goa-Dabolim in 1963. An RAF 8 Sqn Hunter is the furthest aircraft. © Ray Deacon

India's west coast and an equivalent of RNAS Yeovilton. The sprawling base is currently shared with Goa Airport's domestic and tourist traffic, although a replacement civil airport is under construction. Resident are five frontline squadrons with over 40 fixed-wing and rotary types, clocking more than 5,000 hours flying hours per year:

- 300 Sqn** 'White Tigers' & **303 Sqn** 'Black Panthers' flying the MiG-29K;
- 310 Sqn** 'Cobras' with maritime reconnaissance Dornier 228s;
- 315 Sqn** 'Winged Stallions' operating the veteran ASW IL-38 May;
- 323 Sqn** 'Harriers' utilising Dhruv light transport/SAR helicopters;
- 339 Sqn** 'Falcons' with Kamov Ka-31 Helix AEW helicopters.

The MiG-29 Fulcrum interceptor replaced the Sea Harrier as India's carrier-based strike jet and the base houses a 928 ft ski-jump and arrestor landing gear to train and qualify its carrier pilots. The Fulcrum aircraft

were procured along with the Russian built aircraft carrier *INS Vikramaditya*, the flagship of the Indian Navy, which entered service in 2013. Operations with the P-8 jet will commence at Dabolim shortly with the commissioning of INAS 316. P-8s replaced Soviet-built Tu-142 Bear turboprops in the oceanic Anti-Submarine role.

In recognition of this diamond jubilee, the President and Head of State presented India's Naval Air Squadrons with the President's Colour, the highest award given to a military unit. Speaking of the anniversary, India's Chief of Naval Staff Admiral Karambir Singh said: "India's naval aviation has a promising future and is fully committed to meeting its mandate in the maritime domain."

Like Yeovilton INS Hansa houses India's national Naval Aviation Museum and the open-air collection traces the history of the service. British types on display include the Sealand, an early Fairey Firefly TT Mk I, Hawker Sea Hawk



Mk100, de Havilland Dove and Vampire, BN-2 Islander and Westland Sea King. The Firefly was the first operational type to be capable of carrying weapons, although when introduced it was used as a target-tug with familiar yellow and black-stripped 'dazzle' undersides.

The Hawker Sea Hawk was the Indian Navy's first jet when Naval Air Squadron 300 formed at RNAS Brawdy, in 1959 to begin training on the carrier-based aircraft. While it failed to see carrier service in the 1965 Indo-Pakistan War the Sea Hawk did go into action in the 1971 Indo-Pakistan War. Operating from the *Majestic* class light carrier INS *Vikrant*, they bombed the port of Chittagong in then East Pakistan (now Bangladesh) destroying shipping. It equipped two squadrons in Indian

service, both of which flew from *Vikrant*.

India's Sea Harriers operated from the Navy's main naval air station INS Hansa, Goa, between 1983-2016 and served aboard *Vikrant* and its later replacement, the ski-jump equipped INS *Viraat* (the Royal Navy's former HMS *Hermes*) subsequently. They acquired the lower visibility light grey scheme towards the twilight of their careers. Flag Officer Naval Aviation has recently overseen the presentation of retired Sea Harrier FRS.51 IN614 to a school in Amaravathinagar in the southern coastal state of Tamil Nadu. It's hoped the gift will inspire students to further an interest in naval aviation.

Members may be interested to look at the Museum's Website: [www.navalaviationmuseumgoa.com](http://www.navalaviationmuseumgoa.com)



Indian Navy Sea King Mk42B onboard INS *Mumbai* at Portsmouth, UK in 2005. © Dvvroeth

# A Naval fixed-wing pilot under pressure!

By Edward Ashill



Jetstream T2 XX485 of 750 Squadron, Fleet Air Arm, photographed at RNAS Yeovilton. © Robin A Walker

**Whilst on an ATC annual camp at RAF Portreath in July 1988 I was tasked to procure air experience flights for the cadets at RNAS Culdrose.**

I needed clearance from the Commander Flying - Day who duly signed the appropriate forms. Having got all the cadets and staff airborne, in Jetstreams and Sea Kings, I settled down to read the various magazines in 750 squadron's ready room. I realised that two aircrew were in the opposite

corner planning a flight. When their briefing was complete the RAF Officer looked over and asked why I was not flying. I replied that I had filled all slots available. "Do you want to fly and if so, what is your air-nav like?" I told him that I had passed an RAF VRT course at the Air Navigation School, at Finningley and that my map reading was adequate. I donned a flying suit and was ready to go with a half mil air chart tucked into one of its many pockets. The met forecast



**Jetstream T2 at low level.**



**The distinctive shapes of a Jetstream T2 nose and the Turbomeca Astazou engines.**

was perfect for a low-level cross-country exercise, with perfect visibility and very little wind.

Flight Lieutenant Laundy was on detachment to the FAA and was about to check out Lieutenant Commander Eldridge. They both agreed that an extra pair of eyes on the flight deck would be useful, as we would be flying low level through the west country on the way back to land on at Culdrose. The flight was to fly at FL130 to Boscombe Down and RNAS Yeovilton at the same level. After we had made three ILS approaches at each we then stayed at low level to our destination. Westwards we flew around Glastonbury Tor and west of Hinkley Point nuclear power station, over Wimbleball Lake. I had a very good all-round view from the rumble seat aft of the central throttle levers and was aware how busy the airspace was under 500 feet with RN and RM helicopters playing their war games at roof top height.

When Dartmoor Prison came into sight, the P1 circled it twice clockwise, much to the enjoyment of the inmates. Shortly I knew we were over Cornwall when we passed over Gunnislake station where a woman was getting on

the small diesel unit with a pram. I am always impressed by the clarity with which one can see the terrain being flown over. As we are over the Carrick Roads, the check captain told his 'pupil' that the main runway at Culdrose was closed and that he would have to land on the cross-runway, Rwy25 and that his flaps were not working. This was a flapless landing on a strip that is only 1043 meters long, a real test of the pilot's flying skills. As we were on finals, I could see the intensity of his concentration as he executed a perfect landing having juddered along the concrete. We were airborne for 2 hours 15minutes.

Back at the squadron office I make three cups of tea whilst the crew completed the necessary paperwork. After a de-brief with the cadets, I found that they all enjoyed their different experiences from simulated air sea rescues and cliff landings, whilst the Jetstreams gave support to several RN ships in the western approaches. The senior cadet and I saw the Officer of the Watch and offered our thanks for a fascinating and thought-provoking day.

The last time I saw Captain Laundy, he alighted from a Britannia Airways Boeing 737 at Bristol Airport.

# Downwind of Daedalus

By Chris Penney and Richard Macauley



Lady Alanbrooke photographs her husband, Lord Alanbrooke, Chief of the General Staff, Sir Winston L. S. Churchill and Field Marshal B. L. Montgomery of Alamein at the SoFFAAM stand. There were many re-enactors present at the festival with these three probably the most distinguished. © Richard Macauley

**Have gazebo will travel! The Society's recently acquired promotional stand took to the road in September, when we attended the Lee Victory Festival at Lee-on-the-Solent, Hampshire.**

The three-day event was a celebration of the 75th Anniversary of the end of the Second World War, which was delayed from 2020 due to the Covid pandemic. The event was held a stone's throw from the busy Solent waterway and former HMS Daedalus naval air station, the area is a spiritual home for the Fleet Air Arm (FAA).

The festival was a celebration of the wartime 40s, although with the exception of SoFFAAM, the Fleet Air Arm connection was hard to spot.

In pride of place in the arena were a replica Hurricane and Spitfire. Various acts provided musical and family entertainment throughout the weekend, which culminated in a Last Night of the Proms concert on Sunday evening.

It was quickly established that some gazebo designs succumb to a freshening onshore coastal breeze of Force 4 and above when the stand next to ours attempted a VTOL-style take-off and was demolished. But the weather held, the only exception being D-Day-type low cloud on Saturday that prevented a Spitfire fly over. A good time was had by all, new members were acquired and the Society has been invited back to the next event in 2023.





Photos by Chris Penney and Richard Macauley



# A Long Day in May

From the Archive - Part one by Frank Ott D.S.C.



Grumman TBM-3 Avenger Mk.II JZ466 (380) in South East Asia Command markings and representative of the aircraft as used by 851 Naval Air Squadron. © Wikimedia

**With other units of the East Indies Fleet, HMS *Shah* returned to Trincomalee on 9th May 1945-VE Day plus one, from a busy twelve day operation attacking the Nicobar and Andaman Islands and the Burma coast while Rangoon was being taken.**

That evening there was a Victory in Europe dinner in *Shah's* Wardroom with Captain John Yendell as guest. Everyone was very happy with no thought for tomorrow's hangover and the party continued after the Captain excused

himself to attend to an urgent message. It was therefore quite a shock to be suddenly told that we were sailing at 0600 in the morning.

*Shah's* catapult was not working and a catapult was essential for launching Avengers from escort carriers in the East Indies where winds were usually light and the carrier's top speed was only seventeen knots. So 851 Squadron was to transfer from *Shah* to *Emperor* and the immediate job was to transfer sufficient stores and

squadron maintenance ratings during the night under the supervision of a rather unsteady stores officer before we sailed. When we got out to sea lack of wind delayed for two days the take off and transfer of the Avenger aircraft and even then with only enough fuel to get to *Emperor*, some of whose Hellcat fighters went to *Shah*.

*Shah* and *Emperor* were *Ruler* class escort carriers supplied by the U.S.A. under "lend-lease" arrangements. They were built on merchant ship hulls with a displacement of 11,420 tons, length 468 feet and beam 69 feet. They had wooden flight decks, the usual arrester wires and wire barriers and a hydraulic catapult on the port bow. There was a full length hangar and lifts forward and aft. Maximum speed 17 kts. *Shah* usually carried 12 Avengers of 851 Squadron and 4 Hellcats but the number of Avengers had been reduced as the Pacific Fleet now had priority of aircraft and crews.

The Grumman TBF Avenger was also supplied under "lend-lease" arrangements. It had a wing span of 54 feet and was 40 feet long with a single Wright Cyclone engine of 1850 hp. It had 2 x .5 in machine guns in the wings and 1 in the rear ball turret, with a rear firing .3 in gun from a position below the tail. The normal cruising speed was 150 knots. It was also unique in carrier aircraft having an enclosed bomb bay which would take a torpedo, bombs, depth charges or mines. It carried a crew of three, pilot, observer and telegraphist air gunner.

The Task Force consisted of the Battleship *Queen Elizabeth* (Admiral Walker), 5th Cruiser Squadron

consisting of the Cruiser *Cumberland* (Rear Admiral Patterson - CS5), and the French Battleship *Richelieu*, the 21st Aircraft Carrier Squadron (Commodore Oliver - AC21), with four escort carriers, five escorting destroyers and the 26th Destroyer Flotilla (Captain Power - DF26). We were all very impressed with this show of strength and wondered what it was all about. As far as I can remember, we were told that we were to stop vessels evacuating the Andaman and Nicobar Islands which was where we had been on our last trip, but the vessels involved were not told to us.

*Shah's* staff were used to operating Avenger TBR's but *Emperor's* were not. On our previous operation, our first with the 21st Aircraft Carrier Squadron there had been difficulties with radio communication, as we used morse on W/T whilst the fighters used speech on R/T The Admiral was not pleased when our sighting reports were only picked up by *Shah* and passed on to the flagship. We soon settled in and got on well with both ship and squadron officers in *Emperor*.

For the next three days we were on stand by to take off at dawn but all the aircraft remained firmly on the deck. Avengers were fully loaded with bombs and the Hellcats with rockets. We wondered why we were not going off on a search on the usual idea of Find, Fix and Strike! Apparently there were submarines doing the searching whilst we sat and waited. We had spent the last eighteen months in *Shah* flying over most of the Indian Ocean, looking for submarines, one of which,

U 198, was sighted and attacked by the then Commanding Officer Lieutenant Commander A.M.Tuke, DSC, RN. and sunk. We had operated singly or with one other carrier, and now we were part of this large fleet. So we spent the waiting time checking up on our signals procedure and Japanese ship and aircraft recognition, as well as what to do if we came down in the jungle or got captured - not a nice thought. Fortunately the Ready Room was near the walkway alongside the Flight Deck so we could sit and enjoy the sun and cool breeze.

On the evening of the 14th May we were assured, unofficially of course, that whilst we were not stood down, there was no chance of flying the next morning so that we might even have a few drinks at the bar. Of course we should have known better and at some unearthly hour in the night I was rudely awakened and told that four aircraft were going off at dawn on a search. I was observer to the Senior Pilot Kenneth Crompton and our TAG was PO Traverse. So that we could search further the bombs were taken off the aircraft but having done this, it was decided to put the bombs back on again so we all had to take

different aircraft and not our own.

Four aircraft identified as Duties A, B, C, and D were airborne at 0730 and twenty minutes later passed the 26th Destroyer Flotilla heading eastwards at high speed. Our instructions were to fly 120 miles eastwards to a point BB between Great Nicobar and the northern point of Sumatra and then make a diverging search for 140 miles. Our course (Duty A) was 044° and the other three aircraft were south of us at 8° intervals. If we sighted any ships we were to report and all join up and make a co-ordinated bombing attack. We rather hoped that this would not happen at the extremity of the search as we would have little time to join up and attack and still have enough fuel to get back. It was also intended that one aircraft should remain and shadow the enemy.

Near the end of the search at 0937 my TAG picked up a sighting report of two small enemy ships from Duty C, Johnnie Bums, and we altered course to join him. Ten minutes later he reported being hit in the engine and losing oil so that he would have to ditch. At 1010 Duty B, Bill Bowden reported that Bums had ditched and all three crew were in the dinghy and gave their position. We



**HMS Shah in January 1944, en route from Alameda to Cochin.**



**HMS Empress leaving Greenock February 1944.**

later learned from Bowden that Bums was hit whilst making a second bombing run. Bowden dropped all four bombs on a single run. No hits were reported. By 1025 we had not found either the dinghy or the Japanese ships and reluctantly set course for the carrier. We landed on at 1215 very low on petrol after nearly five hours flying. Duty D, Adrian Rowe-Evans, also completed his patrol and returned safely but Bowden and his observer could not find the carrier, nor pick up the radar beacon and eventually had to ditch near an escort which picked up all three unhurt.

Quite a lot had been happening while we were away. The 26th Destroyer Flotilla had been sent at full speed eastwards and was now well ahead of the fleet which remained to the west of Sumatra, indeed it was further west than we had been told which made it difficult to find when we came back.

*Cumberland* and *Richelieu* were also heading eastwards but well behind the destroyers. Following the sighting of two small Japanese ships by Bums at 0937, the remaining five Avengers were launched just after 1000. This included the Squadron Commander Lieutenant Commander Mike Fuller with Senior Observer Eric Lansdell and the Senior TAG CPO Sherlock. Their instructions were to "track 060° for 200 miles, target possible destroyers". The C.O. Duty G was re-briefed in the air to search for Bums dinghy. Unfortunately they were not told that the 26th Destroyer Flotilla was ahead of them which caused quite a few problems.

Duty H had engine trouble and

returned after 10 minutes. Duty F who had joined up with Duties J and K was recalled, circled the fleet for one and a half hours and was then ordered to ditch his bombs before landing on.

Duties J and K flew together and after sixty miles sighted five destroyers, sent an initial sighting report and climbed to attack. They could get no identification response from the destroyers but had doubts about attacking; it took thirty five minutes to clarify that it was the 26th Destroyer Flotilla.

Having resumed their original course they met Bowden in Duty B who failing to find the carriers, had turned back to the destroyers to get a course. Duty J flew back with Bowden until he ran out of fuel and ditched, being picked up by an escort. Duty J was then ordered to land on.

Duty K continued alone but had to shorten his search because of the time spent identifying the destroyers. He returned to the fleet but, like most of us that day, when he reached his Estimated Time of Arrival - ETA, there was not a ship in sight. He started a square search and picked up *Shah's* radar beacon at the maximum range of 80 miles. Unfortunately the fleet regularly altered course after we were airborne without our being told, and it was always away from us and not towards us. It was something we could have done without but observers had to sort it out. Duty K landed with twenty five gallons left.

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**We will continue Frank's article and the forthcoming encounter with IJN *Haguro* in *Jabberwock 106*.**

# Formidable by name, formidable by nature

By Chris Penney



The future RN Type 31 Frigates are based on a Royal Danish Navy design. (Image: via Navy News)

**In naming its yet-to-be built Type 31 frigates, the Royal Navy has resurrected the name *Formidable* for the five-warship class.**

The frigate will be the sixth vessel to carry the name, the most famous of which was a Second World War aircraft carrier. The Navy first introduced the name *Formidable* in the 18th century after the French 80-gun ship of that name was captured as a prize in 1759 at Quiberon Bay, Brittany. This battle both ended fears of French invasion and signalled the rise of the Royal Navy as the world's foremost naval power. Coupled with Wolfe's capture of Quebec and

victory against France at the Battle of Minden, 1759 became known in Britain as *annus mirabilis* or wonderful year.

HMS *Formidable* of the Great War era was the name ship of a three-ship pre-dreadnought class. Built at Portsmouth in 1898 she carried four 12-inch guns and was capable of 18 knots. At the outbreak of war in 1914 *Formidable* was based at Sheerness patrolling the English Channel and employed as an escort covering the British Expeditionary Force's movement to France. In the early hours of 1 January 1915, she was torpedoed by U-24 and sank with heavy loss of life off Start Point, south Devon.



Unsurprisingly an inquiry found that the lack of a protective anti-submarine destroyer screen contributed to her loss – it was a lesson learnt the hard way.

Laid down in 1937 at the same Belfast yard that built *Titanic*, *Formidable* was the second of the Navy's four new *Illustrious* class aircraft carriers. They replaced several veteran ships, none of which had been purpose-built. When they were conceived, Britain was still playing by the rules and adhering to the 1936 London Naval Treaty that limited carriers to a maximum 23,000 tons. The keel length of 710ft ensured the new type could access the RN dry docks at Gibraltar and Malta, while Singapore's was unrestricted in this regard. The rest of the class – *Illustrious*, *Victorious* and *Indomitable* – were all built by Vickers-Armstrong.

The Third Sea Lord and Controller of the Navy, Admiral Reginald Henderson, was determined these new carriers would not be just a modification of the previous unarmoured *Ark Royal* design. His design requirement was that they be capable of operating aircraft even after sustaining substantial battle damage. This meant completely armouring the aircraft hangar. The additional weight involved allowed only a single-storey hangar deck construction to preserve ship stability. This effectively halved the aircraft capacity compared with the older unarmoured carriers, exchanging offensive capability for defensive survivability. Considering future events, and as the Americans found to their cost, it would prove a wise trade-off, although the restriction on aircraft carrying capacity was a severe



**"Finale" depicts the final combat sortie of Lt Robert Hampton Gray DSC VC RCNVR. The only action during WWII when a Canadian FAA VC was won flying from a carrier. © Don Connolly (Connolly Family via CAAA)**



**HMS Formidable in the dazzle pattern camouflage, late 1940. © IWM**

operational limitation. Importantly and in a first for RN carrier design, the class featured a 3-inch armoured flight deck designed to withstand 1,000lb bombs, although this reduced the hangar ceiling to 16 feet. Two aircraft lifts - situated outside the hangar - were protected by armoured doors. Additionally, the new carriers were equipped with early-warning radar, which enabled them to vector aircraft out to a range of 50 miles. Above all, the *Illustrious* class were fast, capable of over 30 knots.

On 17 August 1939 all was set for *Formidable's* launch in Belfast by the wife of Air Minister Sir Kingsley Wood, a surprising VIP choice as just months earlier the Fleet Air Arm had left RAF control. Before the ceremony had even begun, the slipway's supporting wooden cradle still holding the carrier collapsed and the ship moved freely. As *Formidable* gathered speed of her own accord Lady Wood just managed to break the celebratory bottle over the bow. However, a spectator was killed by flying debris and others injured, and from then on the carrier became known as "the ship that launched herself." She was commissioned on 24 November

1940 with Pennant No. 67 and before her war service was over *Formidable* would have Tirpitz firmly in her sights.

Upon raising the white ensign, *Formidable* was assigned to the Home Fleet at Scapa Flow, where she joined *Furious*. In December 1940 she conducted a fruitless search with *Hermes* in the Atlantic for the pocket battleship *Scheer*, deployed by the Kriegsmarine on a commerce raiding cruise. Events in the Mediterranean theatre then intervened, following serious battle damage to her elder sister *Illustrious*. Following the Luftwaffe's deployment of anti-shipping Fliegerkorps X to southern Italy, German bombers mauled *Illustrious* on 10 January 1941 and after a miraculous effort by Malta's workforce she finally escaped the besieged island under her own steam on 23 January, limping back to Alexandria. No longer fit for duty she was sent to the US for repair with *Formidable* taking her place. Her arrival in Alexandria, with new Fairey Albacores aboard, was delayed two months after the Suez Canal's closure due to aerial mining by Heinkel He 111s.

At the Battle of Cape Matapan, *Formidable's* air power contributed to the loss of three Italian heavy cruisers. However, attrition had reduced the carrier's Fulmar fighter defence to the extent she could not provide vital naval air cover during the Battle of Crete's opening stages. On 26 May, returning from pre-emptive Fleet Air Arm air strikes against the Axis airfield on Karpathos, the second largest of the Greek Dodecanese islands, *Formidable*

was struck by Ju 87 dive bombers, leaving her unfit for operations. This, together with the implicit danger from the enemy's newly occupied air bases in Crete and negligible RAF assets to defend the Fleet's Alexandria anchorage, saw *Formidable* withdrawn to the US. A full refit was then undertaken at Norfolk's naval yard in Virginia.

A year later she provided distant force cover during the capture of Vichy-French *Madagascar*, designed to deny possible Japanese interdiction of vital Indian Ocean troopship routes. Upon return to the UK, she embarked Seafires before her participation, along with *Argus*, *Furious* and *Victorious*, in Operation Torch off North Africa. This saw Fleet Air Arm aircraft wearing a five-pointed white star as an identification roundel. A *Formidable* Seafire could claim a first 'kill' for Supermarine's naval fighter with the downing of a Vichy-French Douglas Boston on 8 November.

With allied air forces successfully established ashore on the northern African coast, the Navy's carriers could now operate with more freedom in the western Mediterranean. This saw *Formidable* sortieing from Gibraltar and Algiers in support of Operation Husky, the Sicily landings. In July 1943 *Formidable* and *Indomitable* were part of the deterrent force against Italian naval intervention. After Sicily was secured, *Formidable* became the first carrier to enter Malta's Grand Harbour since *Illustrious'* docking in January 1941. Covering force duties were again the task for Operation Avalanche, the Salerno landings on the Italian mainland

that September, when *Formidable* teamed with *Illustrious*.

The next twelve months were spent with the Home Fleet at Scapa Flow. In 1944 the main threat to the Allied convoy system came from remaining German Kriegsmarine and Luftwaffe units in Norway, attacking shipping bound for north Russia via the Arctic route. Chief amongst these was *Tirpitz*. An attack on the Nazi capital ship by RN midget submarines the previous September had seriously damaged the warship, but 'Ultra' intelligence revealed that sea trials were scheduled for April. The Fleet Air Arm conducted a series of air strikes on the Nazi battleship, from inside the Arctic Circle, in a failed attempt to put her out of action for good. *Formidable*, *Furious* and *Indefatigable* took part in July's Operation Mascot against *Tirpitz*, then holed up in Kaafjord, Alta. The last of these Norwegian summer strikes, Operation Goodwood, took place over three days in August when the three fleet carriers again launched their air groups in further attacks.

*Formidable* had earlier survived "bomb alley" in the eastern Mediterranean during May 1941 (gaining the battle honour) nevertheless her maelstrom came in the Pacific. The RN Eastern Fleet, operating out of Ceylon, had conducted preliminary joint carrier missions with the US Navy and this earlier Indo-Pacific cooperation now formed the basis for UK/US operations against the Japanese homeland. In January 1945, the Eastern Fleet was redesignated the British Pacific Fleet and all four *Illustrious* class fleet carriers



**Corsair fighters, with Barracuda torpedo bombers behind, ranged on the flight deck of HMS Formidable, off Norway, 1944. © IWM**

were eventually transferred to it. After refitting in Gibraltar and passage to Sydney, April 1945 found *Formidable* at Leyte Island in the Philippines. Her 2nd Carrier Air Group comprised 1841 and 1842 Corsair and 848 Avenger Squadrons, the Group's aircraft wearing an R or X on their tailfin. The BPF initially operated as a separate task force within the US Fifth Fleet and was tasked to operate against the Sakashima Islands chain between Formosa (Taiwan) and Okinawa.

With US carriers undertaking operations against Okinawa, the Fleet Air Arm repeatedly struck the Sakashima island group. Throughout the British carriers were subjected to Japanese 'Kamikaze' assaults that severely tested the Fleet's defences. *Formidable* was first hit on 4 May. She disappeared in a cloud of dense black smoke but had been saved by her armoured flight deck - the damage merely resulting in a 2ft dent and aircraft written off, although there were casualties. The way the British armoured carriers quickly resumed

flying operations after such attacks was in complete contrast to the unarmoured flight decks of US Navy fleet carriers which if hit were withdrawn from the fight as a result.

Operating off Japan's home waters on 9 August Lt Robert Hampton Gray DSC RCNVR led two flights of *Formidable's* Corsairs in an offensive sweep over Onagawa Bay anchorage. Intense anti-aircraft artillery fatally damaged his Corsair, dislodging one 500lb bomb, but his remaining bomb hit the *Etorofu* class escort vessel *Amakusa* below the after turret and exploded the ammunition locker blowing out the starboard side of the ship. The enemy vessel rolled over and sank immediately. Posthumously awarded the Victoria Cross, Gray was the only member of the Royal Canadian Navy (RCN) to receive the honour during the Second World War. At the end of the War, *Formidable* was placed in reserve and sold for scrap in 1953.

In late 2019, the UK MoD announced an order for a new 5,700-ton general purpose frigate. Derived from a Royal Danish Navy class of similar build, they are open architecture in design and will be utilised for constabulary duties worldwide, replacing the RN's 2,000-ton Offshore Patrol Vessels of the River class currently deployed overseas. Of modular construction, first steel for the Type 31s was cut in September and they will be assembled on the Firth of Forth. This new frigate will be known as the Inspiration class because the names selected represent significant actions from the Second



World War that will inspire generations of naval personnel to come. They also signify the modus operandi of the 21st century RN; *Formidable* being chosen to reflect today's global aircraft carrier-led operations. In naming its new Type 31 Frigate their Lordships clearly wanted a ship of the class representative of a Second World War carrier that operated from the Arctic to the Pacific. It could be argued that the case for *Illustrious*, with eight 1939-45 battle honours including "Taranto" or *Victorious*, with nine that include "*Bismarck*," was equally deserving. I suspect the Fleet Air Arm VC action – the only one of its kind throughout the War – decided the matter, perhaps rightly, in *Formidable's* favour.

The Type 31s will feature a spacious hangar to accommodate either a Wildcat or Merlin maritime strike/

utility helicopter and allow the operation of UAVs. Upon commissioning these frigates are expected to be forward deployed to the Caribbean, Gibraltar, Singapore and the Falkland Islands. In Jabberwock 101 we commented that the RCN had named a planned 6,600-ton Arctic and Offshore Patrol Ship HMCS *Robert Hampton Gray*. It would certainly be an inspirational sight to see this Canadian warship sailing alongside HMS *Formidable* in the future.

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**\*Both these titles are available from the Fleet Air Arm Museum Shop.**

# Falklands 40 CONFERENCE

SATURDAY 2 APRIL 2022



SoFFAAM are holding a conference to mark 40 years since the outbreak of war with Argentina over the sovereignty of the Falkland Islands.

We have secured several distinguished speakers who served, including General Sir Michael Rose, Cdre. Michael Clapp, Cdre. Simon Thornewill and Cdre. Neill Thomas.

This will be held in the Fleet Air Arm Museum, Yeovilton with a Zoom option for those who cannot attend personally.

Watch the SoFFAAM website for further details, with tickets available for purchase in the New Year.

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[www.fleetairarmfriends.org.uk](http://www.fleetairarmfriends.org.uk)

# July 2021 Zoom Talk

**"The restoration of the de Havilland DH112 Sea Venom FAW22", by Alistair Hodgson and summarised by Robert Heath**



**In the early 1950s. de Havilland produced the twin boom Vampire, a compact and sleek single seat fighter.**

Like its predecessor, the Mosquito, the Vampire's fuselage was made of a plywood/balsa wood laminate sandwich, finished with a fabric overlay. The Vampire was followed by the Venom, which had swept, thinner profile wings, a more powerful engine and wing-tip fuel tanks. The Fleet Air Arm adopted the carrier-borne Sea Venom FAW20 (Fighter All-Weather) modified with folding wings and a retractable 'sting' landing hook. Martin Baker ejector seats were fitted as standard.

Our speaker, Alistair Hodgson, acquired first-hand experience of de Havilland's wooden construction through the restoration of Sea Venom FAW22, XG730, which served between

1957 and 1960 in HMS *Bulwark* and *Centaur*. Operated for several years by Airwork, it then spent eight years as a gate guardian at HMS Dryad. Its wooden construction suffered from exposure to the elements and in 1978 the de Havilland Museum acquired it for its Museum in London Colney, where it remained relatively untouched until 2006. Alistair, a chemical engineer by training, joined the nearby de Havilland Museum and was asked if he would like to take on its restoration. The aircraft was in a dismal condition and restoration would be a challenge, needing a full strip down and refurbishment

Along the way, Alistair learnt lessons. Everything you remove must be put back, so take masses of photographs from every conceivable angle before you touch anything. Each

component was carefully labelled and logged for traceability, and wherever possible all original components were refurbished and reused. A long time can pass before the rebuild starts, so assume that you may not be rebuilding the project and your successor could be starting from scratch. The manuals help, but they don't always reflect the individual aircraft.

In the fuselage, aluminium ferrules were embedded into the plywood/balsa wood laminate to which metal components were attached. Over time these ferrules corroded; each had to be carefully removed and the whole area of bulkhead rebuilt and strengthened. Some fuselage panels had also completely corroded, so those areas had to be cut away and new panels blended in. Alistair made good use of a model aircraft shop close to his office in London, from where he could buy stock lengths of balsa to form the inner layer of the laminate. The aircraft will not fly again, so a practical and durable solution was all that was required. The rot in the cockpit floor was tackled after everything had been stripped out of the fuselage. Standing the fuselage vertically, resting on its firewall, raised the cockpit floor to a convenient level and made the task more manageable.

Once all the panel repairs had been completed, the wood had to be treated for long term protection. Microcellular dope was applied, then overlaid with linen, followed by more dope to reduce porosity. After each coat, residual bubbles were pricked and the whole surface was doped again. 12 to 15 coats

of cellulose dope were applied followed by 12 colour coats. The radome was then attached, also the numerous components on the engine firewall. Canopy refurbishment was a complex task, as the magnesium alloy framework is made from three separate pieces, which had corroded together. It was held on to the fuselage by about 50 bolts which had rotted themselves in, and the Perspex glazing had completely fogged over, needing to be expensively replaced. This problem was resolved with the help of nearby Elstree Film Studios, who employ a hive of cottage industries to meet the unusual demands of film-making. Sure enough, there is a specialist Perspex 'shop' and for £2,000 he replicated all the errant glazing.

Now the fuselage was ready to receive all the decals and the large, hand painted side code numbers. Alistair showed photographs comparing the completed fuselage, sparkling like new, with its original rather pathetic state 15 years ago. The work was a labour of love by volunteers, fitted in between the everyday demands of family life.

The next step will be to refurbish the wings and main undercarriage. In 2006, when Alistair was asked how long it would take to refurbish the fuselage, he estimated roughly seven years. Now when asked how long it will take to complete the refurbishment, the answer is "probably seven years". You will note that 'refurbishment years' are pretty flexible.

Thank you, Alistair Hodgson for a super Zoom talk including, I believe, 76 photographs.

# September 2021 Zoom Talk

**“Development of the F86 Sabre” by Rod Dean and summarised by Robert Heath**



**Rod Dean, a well-known speaker to SOFFAAM, opened his entertaining talk on the F86 Sabre with film of him flying the aircraft at an air display.**

In the 1940s, the United States Army Air Force (USAAF) had a requirement for a jet powered escort fighter. North American Aviation had a track record for producing effective aircraft, including the P51 Mustang. Their response to the requirement was a conventional jet-engined design with Mustang wings, whose designed performance would have been little better than the Mustang. Other designers took a similar straight-

winged approach: the Supermarine Attacker used Spiteful wings; the Russian Yak 3 became the Yak 15 with a jet engine replacing its piston-engine; Sweden replaced the mounted Daimler-Benz piston engine on the J21 with a DH Goblin jet engine and called it the J21R.

North American's winning design was the F86 Sabre, which first flew on 1 October 1947, followed very closely by the Russian MiG 15 on 30 December 1947. Both designs relied on the swept wing technology developed by Germany in WW2. The advantage of swept wings is that they delay the effects of

compressibility at high speeds. The F86 Sabre was produced in the USA, Canada and Australia. Altogether, 9,860 were built, operated by various nations, including the RAF. For an aircraft whose design concept did not change much throughout its lifetime, there was a stunning number of variations. Rod took us through the various model types and explained the differences. The design made interchangeability of components - wings in particular -, relatively easy.

The cockpit was quite small and tight compared with the P51 Mustang, but all-round visibility was excellent. The six 0.5 calibre machine guns could be selected to fire in various combinations. The engine was the General Electric J-47 (derived from the Rolls Royce Nene) and the effective air brakes could be extended at any speed. Like all jets in the 1950s, it was very thirsty and North American shoe-horned fuel into every conceivable nook and cranny. Early marks had automatic leading-edge wing slats that popped out to improve handling at lower speeds. Some models had a 12 inch wing tip extension beyond the slats and there was a confusing variety of wing variants.

How did the F86 Sabre compare with the MiG 15? The Sabre had a 37ft wing span, with 6 x 0.5cal machine guns. The MiG 15 had a 33ft wing span plus one 37mm canon and two 23mm canon. The Sabre had a good punch with lots of ammunition, whereas the MiG had a much greater punch, but with fewer rounds. The Sabre performed better at lower levels, while the MiG was at its best at higher altitudes. It is claimed that

10 MiGs were lost for every Sabre lost, although the USA had more combat experience than Korean and Chinese pilots.

The F86D radar-equipped night fighter had no guns, just 2.75" unguided rockets, and had a distinctive radar nose cone above the engine intake. Canada manufactured a version of the F86E under licence calling it the Mk2. A later Mk6 variant used the more powerful Canadian Orenda engine with 6,500lb thrust and was regarded by many as the best of all the Sabres. As an aside, Rod has always enjoyed aerobatics and showed us a film of the close formation flying of the Canadian aerobatic team in their Sabres.

Australia re-designed the aircraft to take the more powerful Rolls Royce Avon engine. 112 Sabres were built in Australia, while more than 500 Sabres were built by Italy and Japan. All F86 variants had ejection seats.

Throughout the entire talk Rod illustrated each element he was referring to and the frequent film clips were a delight and real treat to watch. Thank you again Rod for a super Zoom talk.



**Temora Aviation Museum Sabre A94-983 and will be displayed once airworthy. Currently grounded due to ejection seat issues. © TAM**



# Talks 2021

By Richard Macauley

By the time you are reading this, we will have just re-started our Talks programme in the FAA Museum.

I am sure we will be able to report that Lt. Col. Sam Allinson gave a fascinating talk of the activities of his unit, JADTEU. Please look at the website Talks page for reports of past Talks and those we have booked for the future.

**All future Talks will now take place in the Museum\* and also presented on Zoom at the same time.** \*Subject to any future governmental Covid restrictions.

**RAF Presentation Team**  
Thursday 25 November 2021

**Taming Eagles: Disarming the Luftwaffe, 1945-1948**  
with Chris Rogers

Thursday 27 January 2022 at 19.30

**307 Squadron Project**  
with Michael Parrott

Thursday 24 February 2022 at 19.30

We are proposing a 'Christmas Zoom' to take place between Christmas and New Year 2021. Further details will be available nearer the time.

## BRISTOL FASHION



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# Farewell 'Tor' from a green Merlin

From Navy News (by kind permission of the editor)



Merlin HC.3 'Q' ZJ132 flying past Glastonbury Tor. © Lee Howard/Navy News

**Crew of Q for Quebec acknowledge the waves from the few dozen folk who've made the trek to the 518ft summit of Glastonbury Tor.**

This is the last time they – or anyone else for that matter – will have seen a green Merlin. After two decades of service, first with the RAF, more recently in the hands of the Commando Helicopter Force, the last HC.3 carried out a flypast of key sites associated with the helicopter.

For two hours, Q for Quebec (ZJ132) performed a farewell tour of southern/south-west England before touching

down at the Leonardo works in Yeovil ready for its metamorphosis.

There, Q for Quebec will undergo the transformation into a Merlin Mk4, the last of 18 machines to receive the upgrade, the wings of the Royal Marines.

Over the past decade, the Commando Helicopter Force has upgraded its entire inventory of aircraft, replacing both the trusty Sea King and the nimble Lynx with 21st Century successors: Merlin and Wildcat.

While the Wildcat was designed and built for operations at sea from the outset, the Merlins were transferred to

the Fleet Air Arm from the RAF.

The battlefield Merlin is faster, has a longer range and can carry more Royal Marines into action – two dozen troops, plus kit – than the venerable Sea Kings, which were retired in 2016. But to fully support the commandos on operations, the Merlins had to be ‘marinised’ – converted for flying at sea, including fitting a folding rotor head and a folding tail boom – to fit in warship hangars; three folded Mk4s have the same footprint as one unfolded Merlin.

Quebec’s ‘farewell tour’ took it past Glastonbury Tor, Deptford Down on Salisbury Plain, where air and ground crew hone many of their skills – RAF Benson in Oxfordshire, home to the Merlins during their Air Force careers, then back briefly to Yeovilton, before being handed over to the folks at Leonardo.

Six crew were along for the ride: aircraft captain Lieutenant Fred Durrant, pilot Lieutenant Commander Ollie Trowman, crewmen Petty Officer Lewis Meadows and Sergeant Ross Howling RM, and two flight test engineers: Petty Officer Darren Riley from the Royal Navy and Mark Hazzard from Leonardo.

When the programme is completed Commando Helicopter Force will have 18 Mk4s with folding parts as well as a fully-modernised ‘digital’ (computerised) cockpit, sensors and instrumentation. It’s anticipated that the remaining seven may be ‘adapted for folding’ at a later date.

The upgrade – turning the green Merlin HC.3 into the sea grey Merlin HC.4, has proved to be an engineering

and organisational challenge as helicopters were needed for training and front-line duties, at the same time as needing revamping, demanding a concerted co-ordinated effort by CHF, the Merlin Delivery Team from the MOD’s Defence Equipment and Support organisation and Leonardo.

A specialist group, the Merlin Fielding Team, was formed at Yeovilton to oversee the complex transition: engineers, aircrew, instructors and experts. It was instrumental in ensuring that the Mk4s which emerged from the Leonardo factory were just what the two Merlin squadrons needed for the next 20 years.

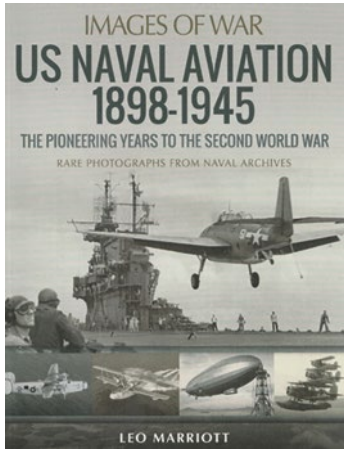
At the peak of the multi-million pound programme, as many as 15 helicopters were in various stages of conversion.



**Captured by SoFFAAM member Roger Wilcox, ‘Q’ photographed from the top of Glastonbury Tor. © Roger Wilcox**

# US Naval Aviation 1898 - 1945

By Leo Marriott. A book review by Malcolm Smith



**This is another splendid book from that prolific writer, Leo Marriott.**

The sub-title "Rare Photographs from Naval Archives" hardly does justice to the hundreds of superb pictures he has collated, supported by detailed captions and introductions to each chapter. The pre WW1 pictures are particularly interesting, such as Eugene Ely's take-off from a ship in 1910, "a convincing illustration" of the potential for naval aviation. The interwar carriers USS *Saratoga* and *Lexington* are well illustrated, and in an article entitled "Coming of Age" the author describes the rapid evolution of both aircraft carriers and naval aircraft, such as of the first monoplane torpedo bomber,

the Douglas Devastator (1937).

In "Going to War", Marriott describes how the US Navy commissioned its newest carrier, USS *Wasp* - famous for its role in 1942 in ferrying Spitfires to Malta. President Roosevelt ensured the large-scale expansion of the Navy in 1940, enabling new carriers (the *Essex* class) to be laid down before USA entered the War after the attack on Pearl Harbour. New naval aircraft included the long-lived Douglas Dauntless, also the Wildcat fighter. Many dramatic photographs illustrate crowded carrier decks during the epic battles of the Coral Sea and Midway.

"Hard Times" describes the desperate battles in the south Pacific, starting with the invasion of Guadalcanal and the deployment to the airfield established there by the US Marines of naval aircraft flown in from escort carriers. "Destination Japan" describes the advance across the Pacific and the devastating effect of Kamikaze attacks. This chapter also indicates the huge scale of the expansion of US naval aviation forces. This splendid book closes with illustrations from 1945 of the new *Midway* class ships, capable of embarking 130 aircraft. "Images of War" is a reasonably-priced softback with an absolute treasure trove of photographs.

# Membership

By Simon Websper

**Standing Order payment membership cards for November, December and January will be sent separately, within the relevant month of expiry.**

Receipt of a membership card does not confirm receipt of payment. Other cards are sent on receipt of payment only.

A big **WELCOME** to the new members who have joined us since the last journal issue:

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3740	<b>Mr S Geeson</b>	Hampshire
3741	<b>Mr J Stallard</b>	Hampshire
3742	<b>Mr L Smith</b>	Hampshire

Total members as of 14 October 2021: 965 Members who have made a Gift Aid declaration: 711. Opting to Gift Aid allows us to claim an extra 25% of your subscription from HMRC so is very valuable to the Society.

**To ensure membership renewal, please update your standing order to reflect the current membership fees shown opposite. There are currently 70 members who remain underpaid, despite two reminders being sent.**

Please let us have your email address to save us postage charges on other communications. It now costs 66 pence per letter sent.

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# Membership Application

I hereby apply for membership of SoFFAAM (the Society) and will pay via:

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- PayPal using [soffaam.joinup@gmail.com](mailto:soffaam.joinup@gmail.com)
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# Carrier Strike Group 2021

*A selection of latest photos from this deployment*



HMS *Queen Elizabeth* (front) with an Indian *Shivalik* Multi-role Frigate (second from front) in the Bay of Bengal.  
© Royal Navy



UK F-35B on board HMS *Queen Elizabeth*.  
© Royal Navy



CSG21 led by HMS *Queen Elizabeth*, and Japan Maritime Self-Defence Force (JMSDF) helicopter destroyer *JS Ise* joined with U.S. Navy Pacific Fleet's current flagships CVN-76 USS *Ronald Reagan* and CVN-70 USS *Carl Vinson* to conduct multiple carrier strike group operations in the Philippine Sea at the beginning of October 2021 © US Navy