

ROUNDEL





January 2024

The Swiss Branch Newsletter

Happy 2024!

F-35B: What you need to know about the Lightning jet

The RAF has taken delivery of three brand-new F-35B jets at RAF Marham in Norfolk.

The latest consignment to arrive at the home of the Lightning Force means the UK has now received 30 of the F-35 fifth-generation fighter aircraft.

It means there are now 26 F-35s in operational service in the UK – three test jets are located in the US and one was lost after *crashing off HMS Queen Elizabeth's flight deck*.

Earlier this year, *British F-35 fighter jets took part in a major NATO exercise* in the Arctic.

More recently, F-35B jets from the Royal Air Force landed in Estonia to *support NATO's enhanced Air Policing mission* along the alliance's eastern flank.

Here's a detailed look at the F-35 Lightning – Britain's most advanced aircraft ever.

How much do F-35s cost?

In March 2020, defence minister Jeremy Quin stated the price of an F-35B was \$115m (about £88.8m when using UK Government March 2020 exchange rates), covering airframe and engine cost.

He added that this figure "represents a 24% price reduction from our first aircraft ordered", with the

expectation that the "downward trend" regarding the cost would continue.

Specifications

The F-35 measures 15.6m (51.2ft) in overall length, has a wingspan of 10.7m (35ft) and a height of 4.36m (14.3ft).

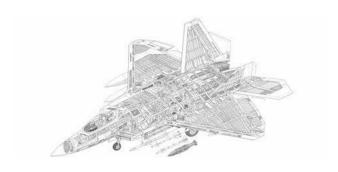
Its top speed comes in at 1.6 Mach or 1,200mph – that is 1.6 times the speed of sound – and its maximum thrust tops 40,000lbs.

The jet has a range of 900 nautical miles and a combat radius of 833km.

The Lightning has a max G rating of 7G which can be compared to the G-force felt in Apollo 16 on re-entry to Earth (7.19g).

A lift fan mounted behind the F-35B's cockpit allows the jet's short takeoff and vertical landing (STOVL) capabilities.

Single-seat, single-engine fighters with integrated sensors, the warplanes are used to conduct missions and operations from the Royal Navy's *Queen Elizabeth*-class aircraft carriers.





Unlike earlier generation fighter jets, the Lightning is designed to carry its weaponry internally, decreasing drag and its radar signature.

Depending on missions, the typical armament on the F-35B includes a 25mm cannon, two bays for air missiles, a further two for bombs up to 450kg.

There are also two wingtip mounds for air-to-air missiles and four for air-to-surface or ground missiles.

The jet itself is made by many different companies. The main contractor is Lockheed Martin, with BAE systems making about 15 pieces of each airframe and Rolls-Royce making the lift fan.

Life on board HMS Queen Elizabeth

The Lightning provides the fifth-generation carrierstrike capabilities to the Royal Navy's two biggest carriers – *HMS Queen Elizabeth and HMS Prince of Wales*.

Rather than the traditional catapult launch, the F-35B takes off from *HMS Queen Elizabeth* via the *ski jump ramp*.

The jet is capable of two types of landing – vertically onto the deck, and also through the shipborne rolling vertical landing, which uses forward airspeed, and allows the aircraft to bring back several thousand pounds of extra weight to the ship.

In 2021, F-35s embarked on *HMS Queen Elizabeth* for the Carrier Strike Group 21 (CSG21) deployment were scrambled a number of times in response to Russian aircraft.

In the earlier stages of the deployment while in the eastern Mediterranean, F-35s were intercepting Russian aircraft almost daily.

The jets were also used to fly combat missions against the so-called Islamic State in Iraq and Syria, taking off and landing on HMS Queen Elizabeth.

Who operates the F-35?

The Royal Air Force started using the jets in missions in 2019.

The Lightning Force, made up of RAF and Royal Navy personnel, is based at RAF Marham in Norfolk and oversees operations involving the UK's F-35B aircraft.

According to the Royal Air Force's website, the following British squadrons fly the *Lightning* fighter jet:

- 17 Squadron, which is stationed at California's Edwards Air Force Base and has been responsible for operational testing of the UK's F-35Bs since 2014
- 617 Squadron, the first frontline F-35 unit, also known as the Dambusters, based at RAF Marham in Norfolk
- 207 Squadron, which is the UK's F-35 Lightning training squadron, also based at Marham

809 Naval Air Squadron, which is due to be stood up in 2023, will be the first Royal Navy formation to fly the F-35.

The F-35 programme is being <u>rolled out international-ly</u> across the US, UK, Italy, Netherlands, Turkey, Canada, Australia, Denmark and Norway, among others.

Israel claimed to be the first nation to use the aircraft in a combat situation, while the US conducted its first air strike using the F-35B in 2018.

Future UK plans for the F-35

The UK has previously planned to eventually have 138 F -35Bs, with 74 of those by 2025.

The 138 figure was clarified in 2020 by Sir Stephen Lovegrove as the "upper limit" of how many would be

bought, a number reiterated as "perfectly plausible" by Air Marshal Richard Knighton last month.

In March 2021, the Defence Command Paper outlined plans to increase the fleet "beyond the 48 aircraft that we have already ordered".

On 26 April 2022, (then) Air Marshal Knighton told the Defence Committee the MOD are "on contract to deliver 48 F-35B aircraft" and, following the Integrated Review, they have "assumed an increase of a further 26 F-35B aircraft", taking the total fleet to 74.

Air Chief Marshal Sir Richard Knighton, who is now Chief of the Air Staff, remarked that all 74 aircraft would be operational, but that "about 20%" of them would be "in maintenance at one time".

He added that they expect to build up three operational squadrons consisting of between 12 and 16 aircraft each.

In November 2021, the UK welcomed three more F-35B Lightning jets into the fleet, bringing the total number owned at that time to 24-21 based domestically and three stationed in the United States.

It is likely only one *Queen Elizabeth*-class vessel will be deployed at once, with the other in dock, and with up to two squadrons (around 24 F-35Bs) on an aircraft carrier at one time.

Go on—crack a smile

There's a guy in town who walks around talking to himself using only figurative language. We call him the Village Idiom.

Whoever said that the definition of insanity is doing the same thing over and over again and expecting different results has obviously never had to reboot a computer.

Scene: A sports store. Customer: Do you have jogging shorts? Me: We have running shorts. How fast were you planning on going?

Q. How much money does a pirate pay for corn? A. A buccaneer.

Q: What do you get from sitting on the snow too long? A: Polaroids!

I asked my 91-year-old father, "Dad, what were your good old days?" His thoughtful reply: "When I wasn't good, and I wasn't old."



This bloody station's a right bloody cuss, no bloody pubs and no bloody bus;
Nobody cares for poor old bloody us. Oh, bloody bloody bloody bloody bloody!

For a mid-century boy like me, brought up on a steady diet of 1950s war movies, Airfix kits, Action Man and War Picture Library comics – all of which either have or will feature in this blog – it came as a bit of a surprise to discover that the wartime generation enjoyed their own comic heroes. Why it was a surprise, I can put down only to my own naivety and a youthful assumption that everyone would have taken the war with unrelenting seriousness. But why should the 20-somethings of the 1940s have been any different from their predecessors who lapped up 'Ole Bill cartoons in the First World War, any more than from their successors? The Daily Mirror's Jane was one of the best known (literal) strips, being accessible to the British newspaper readership as a whole, but it was the Service-specific characters that interested me most – for the Desert Army, Jon's **Two** Types and, for the RAF, duffer extraordinaire, Pilot Officer Percy Prune. These days, Prune is known only to the cognoscenti of wartime popular culture, but the drawings and humour are archetypal of the period.

The Team:

Editor, John Hannon, roving reporter, Alain Dardelin, photographers, Régis Pizot and Simone Meyer, contributing reporters and lifesavers, Alan Baker, and Graham Robertson.

Margaret Duff BEM

28 May 1946 to 24 December 2023

Margaret worked for the Royal Air Forces Association for some 30 odd years, first for the North-West Area then the Northern Area following the merge of the North-West and the North-East Areas as fortunately the new Area Office would be that of the old NW Area based in Leyland.

Prior to the merger, she had been responsible amongst other things for organizing the Woodford Airshow, near

Manchester, as well as the NW Area Annual Conferences and, after the merger, the Northern Area Conferences requiring close negotiations on both sides of the country with local councils such as Blackpool, Southport, Gateshead, Scarborough and York etc.

One of the ceremonies of which she was most proud was organizing, in 2006, the successful 50th anniversary celebration in York Minster of the dedication of the astronomical clock in memory of the 18,000 airmen from Yorkshire, Durham and

Northumberland who fought in the Royal Air Force during World War II, as well as many other soldiers from armies around the world who fought alongside them.

When she heard that the then Association's Annual Conference Organizer was leaving the Association she suggested to her boss in Leyland, Ken Hollands, that she might apply for the job and he said "that's an *expletive deleted* good idea". She was, as you might guess, successful and worked for RAFA's HQ under the leadership of Ed Jarron the then Secretary General.

As an elected member of the Association's Central Council since 1998 one of my jobs on Council was the Annual Conference and so that is how two widowed Cumbrians got together in 2003 and never looked back. Our first conversation was by telephone and Margaret said that sounds like a Cumbrian accent and when I said I was

from Penrith she said she was from Keswick and even forgave me when I said "well someone's got to come from there"! If we didn't want southerners to understand what we were talking about we broke into Lakeland dialect such as "shut t'yat in a hint ye marrer when tha gaas yam". We were also both very fortunate, in that our respective families were happy for both of us.

So now she had to organize those bigger conferences alternating between Blackpool and Bournemouth as there were ten-year contracts with the two places. When the Bournemouth contract expired it was evident that continuing there

would become too expensive and so we started looking for alternative locations in Eastbourne, Cheltenham Racecourse, Scarborough, Manchester, Liverpool and Birmingham. It turned out that the Conference Venue and costs showed that Eastbourne was the best place and particularly, compared to Bournemouth, it was flat for the Sunday morning parade of the RAF veterans.

All those Association Annual Conferences were as you might guess a huge

success from the organizational aspect and Margaret was usually brought onto the stage to take a bow in the closing sessions. The Members loved her.

After retiring from the RAF Association, she became a member of the Swiss Branch and later its Secretary. Margaret was deservedly recognised by Her Majesty Queen Elizabeth with the award of the BEM for her services to veterans.

So together we travelled the world for me to attend Cosmic Ray and Astrophysics Conferences, as well for us to go on holidays.

Our first long haul trip together was to India in 2005, my first visit back there since the early 60's when I did a cosmic ray experiment deep underground for two years in a gold mine – **No, I am not rich!** During our stay in India, we visited the Kolar gold fields and I showed Margaret my house and she

dared me to go and knock on the door, so I did and we were invited in for tea! We also took the toy steam train up to Darjeeling being two of only three passengers on this two carriage train, which stopped frequently in the jungle to catch its breath and build up steam for the next mile or so.

The following year we made the first of our three trips to China visiting Beijing and the Great Wall, Weihai across from North Korea, Xian for the Terracotta Warriors, Shanghai and a week in Lhasa in Tibet. One of the excursions from Lhasa crossed a 5,000 m pass, the highest either of us have ever been on *terra firma*. Higher than Mt Blanc and it was breath taking to see the Himalayas stretched out in front of us.

Then on to Mexico in 2007 when, at the BA boarding gate on the way out from London we were asked "do you mind if you are upgraded to First Class"? What a silly question!

2008 saw the first of our four visits to South Africa, each time driving some 5,000 miles around the country seeing the wild-life, the Boer War Battlefields, Rorke's Drift and Isandlwana, the worst British defeat in the Zulu War. A hair-raising organised day trip up the Sani Pass into Lesotho on the roughest road I have ever seen brought us to the highest pub on the African continent where lunch and a drink or three were enjoyed.

Then came the first of three visits to Russia, mostly in Moscow, but once onwards to Irkutsk and Lake Baikal in Siberia where we received a warm Siberian welcome. On another visit to Russia we took the new high speed train from Moscow to St Petersburg on which we were treated as if royalty! Well of course we were, weren't we?

Of course, the United States also played a part in our longhaul trips on several occasions visiting the wild west, including the Grand Canyon, before or after physics meetings. A trip into the Canyon by helicopter is to be recommended.

Short haul visits included Greece, Malta, Cyprus, Egypt and Armenia. Why Armenia you might ask? I had been invited to be part of a team doing an experiment 3,000 m up on Mt Aragat, not to be confused with Mt Ararat, which we could see in the distance across the border in Turkey and no, we couldn't see Noah's Ark. Accommodation on Aragat was a trifle primi-

tive but we were again warmly welcomed by the locals.

What were our favourite countries? Both of us enjoyed South Africa and I think that was our favourite. China and Russia were interesting and both were on the list for future visits if possible. Short haul favourites were Malta and Greece.

When Covid reared its ugly head in early 2020 my daughter, Maxine, urged me to return to Lancashire as it was more widespread in Switzerland than in the UK at the time. I did so, and Margaret and I were in lockdown for a month or three in Croston. When it eased off, we returned to Switzerland, back to the UK for Christmas and back to Switzerland in 2021 to be once again in lockdown in the second Covid wave!

Neither of us caught the dreaded Covid during all that time having been correctly vaccinated.

We had a good twenty years together and never regretted it one bit. We had and made many friends, at home and abroad. Fortunately, Margaret enjoyed travelling and I had the satisfaction of being able to show her countries like India, China, Russia, South Africa and the States, which I had had the good fortune of visiting earlier in my life.

Margaret you will be missed by many. May you rest in peace. *Requiescat in pace*.

Bryan

On the 11th of the 11th at 11 o'clock

We do it every year, of course, but of all the ceremonies I attend I'm happiest to see the other nations there as well.





Thought occurs...

Have you registered to vote yet? Should you wish to the possibility now exists. Go to the relevant link on the UK goverment's website **GOV.UK** and follow the links.

Would you like to carry the Union flag or our Branch Standard? Both these positions are open.

Would you like to edit our newsletter, *Roundel*? That position is also open.

Wishing you all the best for this new year—and welcoming Anne Spicer to the Committee.

The Editor

Members lost:

Robin Broomfield

Maurice Neri

Bob Shaw

Margaret Duff BEM





Royal Air Forces Association Swiss Branch



2 March	1100	Annual General Meeting, Crowne Plaza Hotel Geneva
24 March	(TBC)	Anniversary of the Battle of the Plateau de Glières (Morette)
20 April	1045	61 Sqn Lancaster Commemoration, La Chapelle Thècle + Lunch
25 April	1030	ANZAC Day, CWGC Cemetery, Vevey
8 May	(TBC)	VE Day, French Consulate General, Geneva
1 June	(TBC)	RAFA Swiss Branch Summer Lunch
8 June		European & Overseas Area Annual Conference, Leicester
15 Sept	1040	Battle of Britain 84 th Commemoration, CWGC Cemetery, Vevey
		+ Lunch
19-21 Oct		RAFA Annual Conference, Wyboston Lakes, Bedfordshire
27 Oct	(TBC)	78 Sqn. Halifax Commemoration, Montcony + Lunch
10 Nov	1030	Remembrance Sunday, Parc Mon Repos
11 Nov	1040	Armistice Day, CWGC Cemetery, Vevey