



# SCHOOLS WELCOME PACK

Information for Schools ahead of a pre-booked visit to the Fleet Air Arm Museum.









# **ON THE DAY OF YOUR VISIT**



Located on the B3151 just off the A303 and A37. It is accessible from the M5 motorway, junction 25 at Taunton.

For smaller groups, it may be possible to access the museum by rail.

Visitors are advised to access routes to Yeovil Pen Mill, Yeovil

Fleet Air Arm Museum, RNAS Yeovilton, Ilchester BA22 8HT. Opening Hours: Please check www.nmrn.org.uk for up to

Junction, or Castle Cary stations, and take a pre-booked taxi

date information.

#### PLAN YOUR JOURNEY

Traffic can build up on the main roads around the area, so please make sure to allow plenty of time to get to the museum. If it does look like you are likely to be late, please give us a ring.

#### **GETTING TO THE MUSEUM**

As you get closer to the site, there are plenty of brown signs on the main roads directing you to the museum. Please be aware, we share a post code with the Air Station, so please make your way to the museum entrance, not the base entrances.

#### PARKING

2

There is plenty of free parking available at the museum for coaches, minibuses and normal vehicles.

Museum Building Entrance

We have a ground floor entrance, which you must press a buzzer for and be guided across, and our main visitor entrance across the bridge. As far as possible, please use the main entrance.

#### **UPON ARRIVAL**

to the museum.

On arrival to the museum, please have the number of teachers and pupils on the visit available, in addition to your booking reference number. These will need to be checked in by our front of house team, and will be used during invoicing.

#### **HEALTH AND SAFETY BRIEFING**

Once you are checked in, you will be guided to your lunch space and receive a welcome and health & safety briefing, reiterating the safety guidance around the museum.

#### **MUSEUM GUIDELINES**

- All individuals under 16 years of age must be supervised by an adult at a ratio of at least 1 adult per 5 pupils
- Please do not eat or drink outside of your designated lunch room
- Please do not run in the museum
- Please be respectful and aware of other visitors within the museum

# SITE MAP

#### YOU MAY WANT TO PRINT AND **BRING THIS MAP ON YOUR VISIT!**



# NAVIGATING THE MUSEUM

#### HALL 1

The first of our halls, which, if followed chronologically, will take you on a journey through the development of naval flight. The exception to this is the temporary exhibition of the Search and Rescue Helicopters within this hall. In addition to the Search and Rescue Exhibition, Hall 1 tells the story of the origins of flight up to World War 1.

#### HALL 2

Hall 2 tells the story of naval flight from World War 2 up to the Korean War. At the end of Hall 2 you can also visit the viewing area, where you can see out onto the airfield from both the ground floor and first floor. On the first floor you can also visit the 'Brush with War' art exhibition, and our temporary exhibition space next to the Swordfish aircraft. Along the right hand side of Hall 2 as you enter, is the entrance to the Hall 3 Carrier Experience.

#### HALL 3

Hall 3 contains our 1970's aircraft carrier experience. You will arrive via Helicopter onto the deck of the aircraft carrier, where you can get up close to a variety of planes from the era. There are animations being played at either end of the deck, with the launch and recovery of an aircraft occurring approximately every 10 minutes. Please note, this can get noisy and may not be suitable for young children or those with sensory issues. You can then choose whether to complete the Island Tour and experience chamber, which lasts approximately 40 minutes and shows you life on board the carrier, or to continue into Hall 4.

#### HALL 4

Hall 4 demonstrates the leading edge of flight, and not only includes modern Naval Aircraft, but also Concorde 002 and other test aircraft. You can enter Concorde via the rear of the aircraft and walk through to the cockpit. An exhibition to commemorate the Falklands Conflict can also be found in the corner of Hall 4.



# TIPS FOR TEACHERS

#### **BEFORE YOUR VISIT**

#### Make the most of a free pre-visit

After making a trip booking, book a free pre-visit with a member of our team to talk through your visit and familiarise yourself with our museum.

#### Read the Pre-visit Info

Please read the pre-visit information carefully, and brief your supporting staff on important points.

#### **Check out our Learning Resources and Trails**

Take a look at our website for our pre-visit learning resources and trails for use in the museum. If there is a particular topic that you are studying which doesn't have resources, get in touch- our back catalogue is quite extensive!

#### Ask us questions!

If you have any questions which aren't answered in the FAQs later in this document, please get in touch! We want to make your visit as enjoyable as possible.

#### Check what is Open

Due to COVID restrictions, some areas of the museum may be closed to the public, such as the Concorde walk through. If this is a problem, please get in touch - we may be able to make special arrangements.





#### **DURING YOUR VISIT**

#### **Arrive Promptly**

If you are delayed, please inform us by phone as soon as possible. At times we have multiple groups visiting the museum, and this may impact the timings of your day and others.

#### **Supervision**

The Fleet Air Arm Museum can be busy with members of the public during peak season, and teachers are responsible for the behaviour and safety of pupils throughout the visit. Please ensure that you are aware of the rules set out within this document.

#### Food and Drink

You will be allotted a space to have lunch and a snack break (if you choose to). Please only eat and drink within this space, as it is not allowed within the museum halls.

#### Facilities

Check the enclosed museum map for the location of the toilets and lunch room facilities.

#### Navigating the Museum

Please navigate the museum in groups no larger than 6, with at least one adult present per group of 5 students under the age of 16. We don't ask that children are quiet during their visit (we do want them to have fun after all!), but please do be aware of other visitors during your trip. We also ask that visitors do not run in the museum- there are some overhanging wings of aircraft which can catch people unawares!

#### Ask us questions!

During your visit, you will likely see some of our volunteers and staff - if you have any questions, please do ask them, they are there for that very reason! The trickier the better!

# FAAM GENERAL ACTIVITY (MUSEUM) **RISK ASSESSMENT**

Area/Location/Department: FAAM Responsible Person: Marc Farrance Risk Assessment Prepared By: MF Date: 16<sup>th</sup> June 2021





What are the hazards?	Who might be harmed and how?	Likelihood	Severity	Risk Rating	What is already being done?	Do we need to do anything else to manage this risk?	Likelihood	Severity	Risk Rating
Slips and trips	Staff and visitors may be injured if they trip over objects or slip on spillages	2	2	4	We carry out general good housekeeping. All areas are well lit including stairs.There are no trailing leads or cables. Staff keep work areas clear, eg no boxes left in walkways, deliveries stored immediately, galleries cleaned each morning by contractor.	Better housekeeping is needed in Museum, eg on spills and leaks. Opening and Closing checks added to reduce risk of obstacles.	1	2	2
Museum AV Elements (projection and experience chamber)	Staff and Visitors (strobe lighting)	1	4	4	Various presentations use strobe lighting and have loud noises etc. A verbal warning and signage exist currently in these areas.	Not at present.	1	4	4



What are the hazards?	Who might be harmed and how?	Likelihood	Severity	Risk Rating	What is already being done?	Do we need to do anything else to manage this risk?	Likelihood	Severity	Risk Rating
Stairs and Raised Area's	Staff and Visitors may be injured if they trip on the stairs etc.	2	2	4	We carry out general good housekeeping. All stair areas are well lit and have adequate handrails or supports. Mesh protection and cabling have been added to a number of stair rails and raised areas.	Opening and Closing checks added to reduce risk of obstacles. Some concern has been raised in the past about the cabling and slip hazards in some raised areas. Additional mesh has been provided in these areas.	1	2	2
Aircraft and Exhibition Spaces	Staff and Visitors may be injured if they walk or run into large objects.	1	3	3	VEM's and VE team regularly patrol gallery spaces. Warning signs and beacons are in place identifying clear walking areas and segregation as appropriate. Rules highlighted to school and uniformed groups through pre-visit guides and on the day as necessary.	Not at present. Further reviews needed if any changes are made to current displays.	1	3	3
Visitors – Leaving the Museum via Fire Exit, access to wider airfield.	Staff and Visitors may be injured if they encroach air station and Yankee hardstanding during flight operations. (Hall's 2 and 3).	1	5	5	All fire exit doors have adequate signage, some in multiple languages. All fire exits are alarmed and any opening would be flagged in the Info Office. CCTV cameras are programmed to sight the external door area giving team members and the VEM visibility of any visitors leaving the Museum. Staff are trained with procedure in place to retrieve or report activity of this kind.	Not at present.	1	5	5

6





# FAAM GENERAL ACTIVITY (MUSEUM) RISK ASSESSMENT CONT.



What are the hazards?	Who might be harmed and how?	Likelihood	Severity	Risk Rating	What is already being done?	Do we need to do anything else to manage this risk?	Likelihood	Severity	Risk Rating
					All lifts are serviced by an external contractor under the supervision of the Facilities Manager.				
	Staff and Visitors could get stuck				Routine Maintenance is performed regularly.				
Use of Lifts	in either the Hall One Experience Chamber or Bomb Lift (Hall 3)	1	3	3	Lift Alarm checks are performed weekly by the Duty Manager.	Not at present.	1	3	3
					Staff are trained in the opening procedure and contactor details are available in case of further support.				
Lost Children	Visitors (Lost Children)	1	5	5	Parents and guardians advised to supervise children in the galleries. Strict adult to child ratio enforced for school groups. Lost child procedure put in place upon report of lost child.	Loose children to be escorted back to parents from Info Office.	1	5	5
Use of interactive non-					Children must be supervised during each activity by parents/guardians.	Remain vigilant and ensure good housekeeping			
integrated, non-electrical interactives, such as	Public (contact with eyes / skin. Spillages causing a slip hazard.	2	2	4	Any spillage is cleaned up immediately and the floor is in a dry, safe condition.	around the site. VE team members to patrol galleries and identify /	1	2	2
dressing up, colouring pencils.					Any damaged equipment removed and, where possible replaced.	remove hazards throughout the day.			



What are the hazards?	Who might be harmed and how?	Likelihood	Severity	Risk Rating	What is already being done?	Do we need to do anything else to manage this risk?	Likelihood	Severity	Risk Rating
First Aid Incident (staff / visitors)	Staff and Visitors may be injured and require assistance.	1	4	4	A First Aid Risk Assessment is in place. FAAM has adequate first aid provision and adequate cover in place. All VEM's trained to assist as appropriate. A defib is located within both the Information Office and Cobham Hall.	Not at present.	1	4	4
Fire	Staff and Visitors. Death if trapped inside a room or building.	1	5	5	A Fire Risk Assessment is in place.	Regularly review the Fire Risk Assessment.	1	5	5
What are the hazards?	Who might be harmed and how?	Likelihood	Severity	Risk Rating	What is already being done?	Do we need to do anything else to manage this risk?	Likelihood	Severity	Risk Rating
Temporary activities within the halls, e.g. School activities	Public	4	4	4	Separate risk assessments created for any activity not covered by the above. Activities placed in areas not conflicting with the above risks or fire risk assessments. Equipment of activities regularly reviewed throughout duration of activity.	Review equipment following each use by PP team.	4	4	4
Ignorance of above hazards and guidance measures	Public & staff	3	2	6	Hazards and guidelines highlighted on website, in welcome materials for groups, and on site. Staff and volunteers to patrol halls throughout the day, to identify and address any areas of concern and advise.	If continued ignorance occurs, escalate to VEM or PP team (school groups) to remove from site.	2	1	2

8





Annual

DATE OF NEXT REVIEW

March 2022.

#### **FREQUENCY FACTOR**

This factor is how often a person is in contact with hazard. Choose the frequency factor based on the classification nearest to the actual exposure to the risk being assessed.

- **1.** Almost impossible to occur
- 2. Extremely unlikely to occur
- 3. Unlikely to occur
- 4. Likely to occur

10

- 5. Extremely likely to occur
- 6. Almost certain to occur

#### **SEVERITY FACTOR**

This factor is the injury consequence of the accident that may occur. Choose the severity factor based on the classification nearest to the actual exposure to the risk being assessed.

<b>1.</b> Unlikely:	An injury is unlikely
<b>2.</b> Trivial:	Resulting in no injury or medical treatment
3. Minor:	Requiring medical attention (possible lost time, but not RIDDOR)
4. Major Injury / RIDDOR:	Accident reportable under RIDDOR (WPA)
5. Fatality:	Single death
6. Multiple Fatalities:	>1 death

#### **TABLE 1: RISK TOLERABILITY**

1–6	Tolerable, no further actions required
8–10	Low, identify any actions deemed necessary to reduce risk and implement so far as is reasonably practicable, with a target date of 6 months
12	Medium, identify any actions deemed necessary to reduce risk and implement so far as is reasonably practicable, with a target date of 3 months
15–18	High, identify any actions deemed necessary to reduce risk and implement so far as is reasonably practicable, with a target date of 1 month
20–36	Intolerable, work not to proceed

	QUENCY currence)	<mark>6</mark> Almost certain	<b>5</b> Extremely Likely	<b>4</b> Likely	<mark>3</mark> Unlikely	<b>2</b> Extremely unlikely	<b>1</b> Almost Impossible
	<mark>6</mark> Multiple Fatalities	36	30	24	18	12	6
	<b>5</b> Fatality	30	25	20	15	10	5
RITY	<b>4</b> Major Injury/RIDDOR	24	20	16	12	8	4
SEVERIT	<mark>3</mark> Minor (First Aid)	18	15	12	9	6	3
	<mark>2</mark> Trivial	12	10	8	6	4	2
	<b>1</b> Unlikely	6	5	4	3	2	1

# HAZARDS SHEET

We want you to enjoy the Museum and return home safely after a memorable visit. The Museum is often busy, so to ensure the safety of your party, please make sure that you have sufficient staff, and where possible try to keep together or remain in supervised groups - even when taking a break.

To help to make your visit safe, we have assessed and controlled risks from the potential hazards we have identified. There will always be dangers from some of the exhibits if they are wrongly used or if you do not look where you are going. To help you to carry out your own risk assessment, we have compiled the tables below. Some of the more obvious hazards are identified along with the measures we have taken to reduce risk and the procedure we would ask you to follow to minimise the possibility of harm. If we have missed anything or you are aware of ways in which improvements can be made, please let us know.

HAZARD	LOCATION	WHAT WE HAVE DONE	WHAT YOU CAN DO
		We maintain the car parks, footpaths,	Wear suitable footwear.
	Outdoor	grassed area and play area, but we cannot guarantee the weather.	Keep to designated assembly areas - and footpaths. Look where you are
Slippery floors, tripping hazards	Indoor	All floors are in good condition and well maintained. Some metal decking can be slippery for certain footwear, but is treated with non-slip compound where necessary. We try to ensure that all walkways and escape routes are free from obstruction.	going, don't rush. Keep to designated walkways. Do not leave bags where other people can trip over them. Don't rush about. <b>DO NOT RUN.</b>
Projections and obstructions	Museum and outdoor areas	The nature of the building and layout of the various exhibitions mean that large objects are accessible to the public.	Look where you are going and don't rush.
Electricity	Museum	All electrical installations and equipment are regularly checked for safety.	Don't play around with electrical equipment.
Hot surfaces and hot liquids	Restaurant	Kitchen and servery areas are prohibited areas. Only authorised members of staff are allowed to enter.	Use the one-way traffic system and be aware of other people. Take particular care when carrying from servery to table. Do not leave tripping hazards in walkways. Don't rush or jostle.
		We have assessed all equipment and exhibits for sharp edges and where possible we have	Take particular care to avoid any sharp edges on exhibits. Look where you are going and don't mess about.
Sharp edges	All areas	fitted guards or clearly signed and marked	DO NOT RUN.
		the area.	Some aircraft wings can be particularly sharp.
Changes in level	Between display areas in certain parts of the Museum	All slopes and changes in level that are not immediately obvious are marked.	Look where you are going. Use handrails.
Steps and staircases	In Museum and to access displays	All steps and staircases are unobstructed and maintained in good condition. They are all provided with adequate balustrades to prevent falls.	To gain height, use only stairs and steps provided. Look where you are going, don't rush or mess about. Avoid crowding. Do not climb on or lean over balustrades.
			Do not climb on exhibits.
Ladders and scaffolding	In Museum and out of doors	Ladders and scaffolding are provided for maintenance purposes only. They should be clearly marked and in secure areas.	Do not climb on ladders or scaffolding.



# **HAZARDS SHEET CONT.**

HAZARD	LOCATION	WHAT WE HAVE DONE	WHAT YOU CAN DO
Dark areas	Various displays	It is often necessary to use low lighting levels to give full effect to some of the displays. The lighting level will always be sufficient for your enjoyment.	Follow the instructions given. Avoid crowding. Take particular care when moving between different light levels.
Fire	Museum	All fire escape routes and exits are clearly signed. Fire alarm systems are regularly checked and all members of staff are familiar with the fire procedure.	On hearing the fire alarm, follow instructions and assemble in the designated area. Do not re-enter the Museum until told that it is safe to do so by an authorised person.
		School and college groups will be given fire information as part of our introduction to the Museum.	Particular care is necessary if leaving the building through an exit which leads onto the airfield.
Moving objects and working equipment	Displays and equipment in the Museum	All exhibits having moving parts will be clearly signed and fenced. Moving parts will not be accessible to members of the public.	Keep behind barriers and follow instructions. Do not attempt to touch any moving part of a display.
Transport	Car park and roads	Car parking spaces are clearly marked in the car park. The coach parking area is adjacent to the pedestrian assembly areas and walkways.	Assemble in designated area and await instructions. Avoid playing in car park area and be aware of traffic. Take particular care when crossing the road from the disabled persons' entrance.
			Stay together in a party or in supervised smaller groups.
			Follow instructions and don't "mess about" in the Museum.
	Own party	We try to make sure that all visitors enjoy their experience with us. Each party is given a short induction and instruction on the basic safety requirements of the Museum.	In cases of repeated bad behaviour which can affect the enjoyment and safety of other people, visitors will be asked to leave.
People	Other people	We try to make sure that there is adequate space for all visitors to enjoy all the exhibits. On occasions when it is particularly busy we may ask you to re-route to another part of the Museum.	If you get lost or experience any other difficulty, please ask one of our security guards who regularly patrol the whole of the Museum. They are there to help you. If you are concerned about your safety or the behaviour of other visitors, please report it. Any member of staff will organise the action deemed to be necessary.

Supervision of groups is the responsibility of the teachers, group leaders or other nominated adults in the party. Please ensure that such persons are aware of what is expected of them. Close supervision is especially relevant in the Museum Shop and during the 'Carrier Experience' and no one under 16 is permitted in the latter unless accompanied by an adult. The Carrier Experience is one of our most exciting exhibitions, it takes approximately 45 minutes to complete. It is a recreation of the flight deck and island of Ark Royal. At times it is dark and noisy but this adds to the authenticity and experience. Above all it must be impressed on groups that **NO RUNNING** is allowed in the Museum. Aircraft have a surprising number of sharp edges and an impact can result in injury.



# AIRCRAFT FACT SHEETS

We have developed some fact sheets for certain aircraft within our halls for you to use at your convenience. If you would like more information about any of them, or there are any aircraft not listed here that you would like specifics on, then please let us know!





# SHORT S.27



STATISTICS	
Crew:	2
Date Built:	1910
Max Speed (mph):	48
Max Flying Height (ft):	1000
Wing Span (metres):	14.15

Built by the British Short brothers in 1910 after being inspired by the Wright brothers, the S.27 was used by the Royal Naval Air Service to train the Royal Navy's first pilots. The aircraft is primarily made from a wooden frame, doped linen wings (for waterproofing and sealing of the fabric to prevent airflow), and wires to control the aircraft. This aircraft is a replica.

#### SUGGESTED CONVERSATION POINTS:

What its made from; No electronics all controlled by wire; Similar to Wright Brothers aircraft (was built by Short Brothers, who met the Wright brothers and took some of their ideas).

### **SOPWITH BABY**



STATISTICS	
Crew:	1
Date Built:	1915
Max Speed (mph):	100
Max Flying Height (ft):	10000
Wing Span (metres):	7.82

This scout/bomber made its first frontline appearance in 1915. It usually had a Lewis gun fitted above the fuselage, to fire above the moving propeller or up at airships above. An additional gun could be fitted in line with the pilot's view, requiring a synchronising mechanism. You can see an example of this technique in the interactive near to the aircraft. This particular aircraft has been rebuilt using parts from two different aircraft.

#### SUGGESTED CONVERSATION POINTS:

14

Planes developed quickly from 1913 onwards- why?; Is a Bi-plane (Bi=2); Is a Float plane, look at the floats- are the wheels actually attached to the aircraft?; Has rockets- more like fireworks with a sharp end to shoot down Airships like the picture on the wall (not very accurately!) This was the first use of basic air to air missiles.

# **FAIREY FULMAR**



The Fairey Fulmar first appeared in 1941 and is fitted with a Rolls Royce Merlin 30 Engine. Fulmars saw action in many different theatres of war, providing defence of convoys to Malta, to defending Ceylon (now Sri Lanka). What it lacked in speed, it made up for in fire power, with 8 machine guns in the wings, and provision for two 250lb bombs.

#### SUGGESTED CONVERSATION POINTS:

Change in style from Bi-plane to mono-plane, change in materials to metal, folding wings (why? To save space on aircraft carriers). Compare speed, scale and fire power with aircraft in Hall 1. Compare with Fairey Swordfish and changes in such a short period of time. This aircraft is the last remaining of its type.

## **CORSAIR**



The Corsair was one of the finest aircraft used in WW2. At its first use in 1940, it had the most powerful engine of any fighter aircraft. Naval Corsair's carried six 0.5-inch calibre guns in the wings, and had provision for 1000lbs of bombs. The propeller is also the largest of any fighter aircraft, so the wings are shaped to accommodate this and raise the propeller clear of the ground.

#### SUGGESTED CONVERSATION POINTS:

Suggested Conversation Points- Involvement of aircraft in WW2; Use on aircraft carriers (look at folding wings); materials used; development of speed & firepower; why did it need these features? This aircraft is the last remaining Royal Navy Fleet Air Arm of its type.

STATISTICS	
Crew:	2
Date Built:	1941
Max Speed (mph):	256
Max Flying Height (ft):	22400
Wing Span (metres):	14.13

STATISTICS	
Crew:	1
Date Built:	1940
Max Speed (mph):	415
Max Flying Height (ft):	34500
Wing Span (metres):	12.5

# **VICKERS SUPERMARINE SEAFIRE F.17**



STATISTICS	
Crew:	1
Date Built:	1942
Max Speed (mph):	380
Max Flying Height (ft):	32000
Wing Span (metres):	11.23

Supermarine Seafires are the Navy's sister aircraft to the well-known Spitfire. The Spitfire was converted into a Seafire, most noticeably by creating folding wings, which allowed for more space on aircraft carriers, and the addition of an arrestor hook for landing in aircraft carriers. This Seafire 17 had capacity for cannons and 303 machine guns, and rocket propelled bombs below the wings.

#### SUGGESTED CONVERSATION POINTS:

Compare difference between Seafire & Spitfire (folding wings, hook on tail). Why was Navy version needed (meant they could be transported/flown from aircraft carriers). This aircraft is last F.17 in existence.

### **GRUMMAN AVENGER**



STATISTICS	
Crew:	3
Date Built:	1942
Max Speed (mph):	260
Max Flying Height (ft):	25000
Wing Span (metres):	16.51

The Grumman Avenger was one of the most successful naval aircraft of WW2 and beyond. Although designed as a torpedo bomber, the Fleet Air Arm used the Avenger as a bomber, minelayer, and in other attacking and reconnaissance roles.

#### SUGGESTED CONVERSATION POINTS:

16

Size comparison with other aircraft in the hall- why is it bigger? Carried heavier weapons- bombs, torpedoes, mines, so needed to be bigger.

# **BLACKBURN BUCCANEER**



This Buccaneer was the first specifically designed to fly off aircraft carriers at a low level (avoiding enemy radar detection) for the delivery of nuclear weapons. It could also carry rockets, missiles and other non-nuclear bombs. The aircraft seen here started its service in 1963 and retired in 1971 having completed 900 hours of flying.

#### SUGGESTED CONVERSATION POINTS:

Nuclear weapons & threat of Mutually Assured Destruction; how radar works; jet engines vs propeller driven engines; was originally all painted white to aid reflection of nuclear flash and protect pilots.

# **SUPERMARINE ATTACKER**



The Attacker was the first jet fighter specifically for front-line service with the Royal Navy. In terms of weaponry, it had four 20mm guns in the wings, with provision for eight 60lb rockets or two 1000lb bombs below the wings. The Attacker was unusual for a jet as it had a tail wheel, which made it difficult to land and take off.

#### SUGGESTED CONVERSATION POINTS:

Compare to older aircraft speeds and stats; materials; where are the wheels of the other aircraft in the hall?

STATISTICS	
Crew:	2
Date Built:	1959
Max Speed (mph):	667
Max Flying Height (ft):	40000
Wing Span (metres):	13

1
1951
560
45000
11.25

# **FAIREY GANNET**



STATISTICS	
Crew:	3
Date Built:	1955
Max Speed (mph):	290
Max Flying Height (ft):	25000
Wing Span (metres):	16.56

From 1955, the Gannet was the main long range anti-submarine aircraft of the Fleet Air Arm. The Gannet was revolutionary, had two engines, working to drive one set of propellers (which themselves turned in two different directions). It could carry up 2000lb of bombs, torpedoes, depth charges or rockets.

#### SUGGESTED CONVERSATION POINTS:

Compare size to other aircraft; propellers vs. jet engines; why did it need different weapons than faster jet aircraft?

### **HAWKER SIDDELEY SEA VIXEN**



STATISTICS	
Crew:	2
Date Built:	1951
Max Speed (mph):	650
Max Flying Height (ft):	48000
Wing Span (metres):	15.54

The Sea Vixen was originally developed by the de Havilland Company and was the first swept-wing, two seater, allweather fighter in Navy Service. The Sea Vixen replaced the Vampire, and had much better flying performance and weapons, with guns replaced by guided weapons (for the first time on a British Naval aircraft).

#### SUGGESTED CONVERSATION POINTS:

18

What are guided weapons? What is 'swept wing'? Look at wing shape and compare to other earlier aircraft; Aerodynamics.

### **CONCORDE 002**



Arguably one of the most famous aircraft in British history, the Concorde project was split between Britain and France. The Concorde on show here is Concorde 002, and was the first British Concorde built and flown. It was a test aircraft (hence the lack of seating) and is on long term loan from the Science Museum, and is a standalone aircraft outside of the naval narrative.

#### SUGGESTED CONVERSATION POINTS:

Why Concorde was retired (was expensive to run, among other issues); why it doesn't look like a normal aircraft on the inside (it was a test aircraft); How you could escape (parachute hatch); Why Concorde was so special (fastest passenger jet, flew London to New York, at its fastest time 2hrs 52mins).

### **FAIREY DELTA**



The Fairey Delta was an experimental aircraft designed to investigate Supersonic speed. Developed over two years, in 1956 it broke the world speed record. Later, the aircraft was used to provide design information for Concorde 002. If you compare the two you can probably identify common features, such as the wing shape and the 'droop snoot' (where the nose drops to give the pilot better visibility on landing). Like Concorde, it is on loan from the Science Museum.

#### SUGGESTED CONVERSATION POINTS:

Can you spot the similarities between this and Concorde? Why do you need to test an aircraft before it is designed/flys?

STATISTICS	
Crew:	6 or 7
Date Built:	1969
Max Speed (mph):	1330
Max Flying Height (ft):	58000
Wing Span (metres):	25.564

STATISTICS	
Crew:	1
Date Built:	1954
Max Speed (mph):	1132
Max Flying Height (ft):	50000
Wing Span (metres):	8.18

# **HANDLEY PAGE HP.115**



STATISTICS	
Crew:	1
Date Built:	1961
Max Speed (mph):	248
Max Flying Height (ft):	N/A
Wing Span (metres):	6.25

The HP 115 was another unique experimental aircraft built to provide data on the 'Swept Wing' shape at low speed. They put the aircraft through its paces, conducting a series of low speed handling trials. They fitted smoke generators to the aircraft to study the vortex pattern that would be created during flight. Neil Armstrong was due to fly this aircraft in 1962 as a test pilot, but after his selection as an astronaut, NASA refused. He eventually flew it on 22 June 1970.

#### SUGGESTED CONVERSATION POINTS:

Who is Neil Armstrong? What is the job of a test pilot? Why did they use smoke to study the aircraft? Would you need to build an aircraft to test this now, or could it be done on computer?

### **WESTLAND SEA KING**



STATISTICS	
Crew:	2, & up to 28 marines
Date Built:	1969
Max Speed (mph):	144
Max Flying Height (ft):	10000
Wing Span (metres):	Rotor diameter 18.9

The Sea King helicopter is a very versatile aircraft, and has been used in a variety of roles in the past, from Coastguard and Search and Rescue (as you will see in Hall 1), to anti-piracy operations and troop carrying (Commando helicopter are often referred to as 'Junglies'). This particular aircraft was hit by rocket propelled grenade in Afghanistan, jet fighter attack in the Falklands, and ground to air small arms attack in Bosnia, and is now often referred to as 'The King of the Junglies'.

#### SUGGESTED CONVERSATION POINTS:

20

Why is it green? Why is the Sea King in Hall 1 a different colour? How does a Helicopter work?

### WESTLAND LYNX



The Lynx, as well as the Sea King, was built by Westland Helicopters in Yeovil. It was used by the Fleet Air Arm in a variety of roles, such as reconnaissance and attack helicopters, anti-submarine, and anti-drug smuggling. It is a aerobatic helicopter, and can if necessary perform loops and rolls. They are used around the world, in different branches of the military, highlighting the popularity and usefulness of the aircraft.

#### SUGGESTED CONVERSATION POINTS:

Look out a viewing gallery and compare the Lynx and the Wildcat (the new generation of small helicopter).

### **BAE SEA HARRIER FRS. 1**



The Sea Harrier in the corner of Hall 4 can be seen on the 'Ski Ramp' which was developed here at RNAS Yeovilton in order to assist with take-off of aircraft carriers. This aircraft was sent to the Falkland Islands in 1982. Later it was deployed to Bosnia, and crashed into the Adriatic sea in 1994. Much of the wreckage was recovered and reassembled into what you can see today. Both this and the other Harrier on show in Hall 4 are capable of VSTOL (Vertical and Short Take-off and Landing), enabling them to be more manoeuvrable.

#### SUGGESTED CONVERSATION POINTS:

What does 'Vertical and Short Take-Off and Landing' mean? Why is it so useful on an aircraft carrier or where there is a small runway?

STATISTICS	
Crew:	2 or 3, & up to 8 troops
Date Built:	1971
Max Speed (mph):	201
Max Flying Height (ft):	10500
Wing Span (metres):	Rotor diameter 12.8

### Compare with Sea King, uses and size; Why is it grey?; What are the benefits of it being smaller than the Sea King?

1
1978
735
51000
7.6



#### Can I come for a pre-visit?

Yes! Once your visit is booked, teachers are encouraged to come for a free pre-visit, where they can meet a member of staff to answer any questions around there visit. If you would like to come for a pre-visit, please get in contact beforehand.

#### Where do I go once we've arrived?

Once you have arrived in the car park, please head up the stairs to the main entrance area (or the lower ground floor entrance for groups with students with mobility issues). From here, you will be taken to your lunch space where you will leave your bags, receive a briefing, and go about your visit!

#### What can we do whilst visiting the museum?

We have four hangars full of aircraft, from the origins of flight to the modern day jet engine.

In the past, supervised groups have done research projects around specific aircraft, literacy projects for creative writing, and taken sketches of aircraft for art projects. The options are endless, and our team would be happy to discuss ideas with you during your pre-visit.

#### How do we navigate the museum?

An up to date map is provided as part this welcome pack, but there are also interactive map terminals at various points throughout the museum. Halls 1-4 generally follow a historically chronological order, with the one way system directing you in this route. During busy periods, your group of 6 may be asked to start at a specific point within the museum to ease congestion.

#### Is the museum fully accessible?

95% of the museum is physically accessible by those in wheelchairs, but unfortunately there are certain areas which are not. For more information, visit https://www.fleetairarm.com/aviation-museum-disabled-facilities.aspx (LINK TBC) or contact us to discuss this in more detail prior to your visit.

#### Do you have a Museum shop?

Yes! Our museum shop is at the entrance to the Welcome Gallery, or there is a smaller shop in Hall 1. We ask that you take one small group at a time to the shop as it isn't big enough to take an entire class.

#### Is photography allowed in the museum?

Yes! We would encourage teachers and pupils to take lots of photographs during their visit and, where permissions allow, connect with us on social media to share them. We love seeing snaps from your school visits!

#### What is your lost child procedure?

Should a child from your group be unable to be located, please approach a member of staff as soon as possible. We will then enact our 'Lost Child' Procedure across the site, further details of which can be provided should you so wish.

#### Do I need to bring a First Aid Kit?

During your visit, you are still responsible for the wellbeing of your group and administering any First Aid. However, should you have any medical emergencies then our trained First Aid Team will be on hand to support and assist you as necessary.

#### If I arrive earlier than my stated time, will I be allowed into the museum?

If possible, we will allow you earlier access, assuming that it is within usual museum opening hours. However, there may be occasions where this is not possible due to other groups and capacity limits, so we suggest that you arrange to arrive as close to your time slot as possible.

#### Any other queries?

Should you have any further questions, please contact email address **fleetairarm.learning@NMRN.org.uk** or call **01935 840565 (Opt 3)**.

