January 15th

Memory verse

and they shall beat their swords into plowshares, and their spears into pruninghooks: nation shall not lift up a sword against nation, neither shall they learn war any more. Micah 4:3b More information on this memory verse in the lesson for 18th January.

A flying adventure to read¹

On 15th January 2009 US Airways Flight 1549 took off from LaGuardia Airport in New York on its way to Charlotte and then Seattle. As the plane was climbing towards the desired altitude, it encountered a flock of Canada geese. When these heavy birds hit the plane and got sucked into the engines the engines failed. Now the pilot had to somehow get the plane down in a safe place



but without any engine power. Could he make it back to the airport?

The pilot on that flight was fifty-seven year old Captain Chesley Sullenberger an experienced pilot who had been a US air force fighter pilot and had learned to fly as a boy of 16. He was also an experienced glider pilot and an expert in aviation safety. His co pilot, Jeff Skiles, was also very experienced but their position was bleak. All around them were the tall buildings of densely populated New York City and they were coming down fast. How could they bring the plane down without hitting them?

Captain Sullenberger contacted air traffic control and told them what had happened. He quickly worked out that they could not reach any of the nearby airport runways. There was only one thing for it. "We are going to be in the Hudson," he told the shocked air traffic controllers.

At this time of year the water in the Hudson River is freezing cold. However, if the captain could get the plane down without sinking it or breaking it up, the passengers could be got out onto the wings and life rafts. From there they had some hope of being picked up by river craft such as ferries before hypothermia set in. The plane would also avoid all the buildings and populated areas but it would be a difficult thing to do.

Captain Sullenberger announced "brace for impact" to alert the cabin crew who began shouting instructions to the passengers, telling them to keep their heads down. Meanwhile the co pilot began reading out the speed and altitude readings to the Captain so that he could keep his eyes on the rapidly approaching water surface. They lined up along the path of the Hudson River and crossed over the George Washington Bridge at well under 300 metres. The Captain was concentrating hard now. He needed to achieve a slightly nose up attitude as they hit the water. If he pulled up too soon they would slow too much and hit the water too hard. This would damage the plane. If he pulled up

href="https://www.flickr.com/people/22608787@N00">Greg L - originally posted to <a href="//commons.wikimedia.org/wiki/Flickr" class="mw-redirect"

title="Flickr">Flickr as Plane crash into Hudson River, CC BY 2.0, Link

¹ Image:By <a rel="nofollow" class="external text"

too late they would descend into the water very rapidly. This would cause the plane to sink too fast for rescue to be possible.

The plane hit the water hard and began to decelerate. As it slowed to a stop the pilot and co pilot realised they had managed to put the plane down without damaging it. Now they had to act calmly but with speed. They had 150 passengers and three cabin crew in an aeroplane that was rapidly filling with freezing river water.

Captain Sullenberger opened the cabin door and shouted to the cabin crew to evacuate the plane. The evacuation onto the wings and floats or into the water was orderly and the passengers helped one another so that even a baby and an elderly passenger who had come aboard in a wheel chair were able to leave the cabin safely. The captain then passed up and down inside the cabin twice, despite the rising water, to make sure no one had been left behind before making his own way outside the plane.

Now the passengers were out in the cold, some in the freezing river water, some on the plane wings, some on the plane's flotation rafts. At once river ferries diverted course and, thanks to the well practised emergency procedures on these craft, they were able to begin rescuing people from the water. Emergency services were on the scene next and soon everyone was on the way to hospital where they were treated for shock, hypothermia and minor injuries.

The happy outcome of this accident was that no passengers lost their lives. This was such an unlikely, but good, outcome that it has become known ever since as the "Miracle on the Hudson."

One of the great lessons learned during this accident is that safety drills and procedures, if well learned, can be carried out effectively and result in the saving of lives. The crews of the ferries, for instance, said afterwards that they simply knew what to do automatically and were able to carry it out efficiently as if it were something routine because of the many times they had practised such rescue drills.

Something to think about for older children

There is no doubt that this rescue was a wonderful outcome to what could have been a tragedy. But was it a *miracle*? A miracle is "an event that involves the direct and powerful action of God, transcending the ordinary laws of nature and defying common expectations of behaviour."² Evaluate the "Miracle on the Hudson" according to this standard. What conclusion do you reach?

Something to do

Captain Sullenberger was an experienced glider pilot. Gliders are unpowered craft designed to be towed or launched into the sky. Glider pilots use currents of rising air called thermals and other weather phenomena to stay airborne. They can do this for many hours before having to land. You can see from the picture on the right that gliders have long wingspans to do this effectively. Once Flight 1549 lost its engines it had to be flown like a glider – but it



was not a glider it was an Airbus A320-214 designed to fly with engines! There is no doubt that the Captain's experience with gliders helped him make a safe water landing.

² https://www.gotquestions.org/definition-miracle.html

If you look at the lesson for 8^{th} April you will find instructions for making a paper aeroplane. This is really a paper glider – it has no engine and has to be launched. You could make one today and find out how long you can keep it airborne.

A useful thing to learn³

Have you ever been on an aeroplane flight? If so you will have seen the stewards and stewardesses giving their instructions to passengers on how to fasten seat belts correctly, how to use safety equipment and where to find their life jackets. It was the adoption by the passengers on Flight 1549 of the brace position as instructed by the cabin crew that helped to prevent injuries and so saved lives. You can learn this simple position and practice it today using an ordinary chair with another chair placed in front of you. Probably you will never need to use the brace position but if you *do* you will be glad you knew exactly what to do.

The brace position as set out to airlines in the UK is slightly different from that in the United States and some other countries due to some research done here in the UK after a particular accident. The advice below is the UK advice.

Passengers should ensure that their seatbelts are fastened correctly and tightly. Passengers should place their feet and knees together with their feet firmly on the floor (either flat or on the balls of their feet) and tucked behind the knees to protect shins and legs from the base of the seat in front. They should bend as far forward as possible, resting their head against the seat in front if it is within reach and place their hands on the back of their head, with the hands one on top of another (rather than interlocked). Their elbows should then be brought in. The head should be as far below the top of the seats as possible to prevent



injury from any collapsing overhead compartments. If you are too small to adopt the position in the picture, get as close to it as you can. Make sure your head is down.

Somewhere to visit



Sir Hans Sloane (1660-1753) was a successful medical doctor with a passion for collecting books and curios. At his death he left his collection to the nation and it formed the basis of the contents of the British Museum. Two libraries were added to Sir Hans's collection that of Sir Robert Cotton (1571-1631) and the Harleian Collection which was the library of the Earls of Oxford.

Where should all these wonderful books and artefacts be displayed and used? The trustees of the Museum rejected what is now Buckingham Palace as being in an

inconvenient location and chose instead the mansion in Bloomsbury belonging to the Montague family which was up for sale. The first exhibition galleries and reading room for scholars opened on 15 January 1759. It was the first museum of its kind, national, free to visit and aiming to collect examples of many different types of things.

The Royal Library was added to the Museum in 1757 and the collections outgrew the building. By the early nineteenth century a new building was needed. The present British Museum building, on the same Bloomsbury site opened in 1831.

³ Illustration from <u>https://www.flightsafetyaustralia.com/2018/08/the-brace-position-what-passengers-need-to-know/</u> permission applied for 20/12/23

We will be meeting some of the objects in the British Museum in the lessons for 11th April, 15th July and 14th November, meanwhile you might like to peep ahead to 12th July for some tips on making your own museum.

The British Museum contains the most extensive collections of artefacts relating to the Bible outside the Middle East itself and Christians delight to go there to see things that come from "Bible Times". If you would like to do this yourself there is an excellent guide book *Through the British Museum with the Bible* by Brian Edwards and Clive Anderson which you can take with you on your visit.⁴ The book's publishers, Day One, also run guided tours of the museum from time to time which you can join⁵ – so if you can, plan your visit today!

^{4 &}lt;u>https://www.dayone.co.uk/products/through-the-british-museum-with-the-bible</u> A Video of some of the book's contents can be found here: <u>https://www.youtube.com/watch?v=Q5Ty5dpPoX4&t=13s</u>

⁵ Information here: https://www.dayone.co.uk/pages/british-museum-tours