

Flight

Harry Ferguson and Sir James Martin

Henry George (Harry) Ferguson was born in County Down in 1884. He had ten brothers and sisters. He grew up on a farm.

Harry left school when he was fourteen to work on the farm. He did not really enjoy farming but really loved solving problems and mechanics. Harry's brother Joe offered him work in the small **repair** workshop he ran in Belfast. This type of job suited Harry much better than farming, so he went to work for Joe.

Harry became interested in flying. The Wright brothers had been the first in the world to fly a plane. Harry wanted to be the first in Ireland. Harry began designing and building a plane in 1909. On New Year's Eve 1909, the plane took off and flew for about 130 yards. Harry had done it!

In 1910, Harry flew a plane from Dundrum to Newcastle beach in County Down. As a result, he won a £100 prize offered by the town. He was able to fly his plane a distance of almost three miles. If you visit Newcastle today, you can still see a carved stone explaining Harry's famous flight over the beach.

James Martin was born in Crossgar in County Down, in 1893. He was an inventor and he designed planes. He had a friend called Captain Valentine Baker. James Martin set up an aircraft company with Captain Baker. On 12th September 1942, Captain Baker was killed. He had tried to make an **emergency** landing while flying an aircraft. James Martin was very sad that his friend had died. He wanted to make flying safer.

James was asked to find out if there was a way for pilots to escape from fighter planes. James decided that the best way to do this would be for the pilot's seat to leave the plane (**eject**). James invented a type of ejection seat known as 'The Martin-Baker' ejection seat. Many lives have been saved by James Martin's invention.



Questions

Read the passage about the two men from County Down who are associated with the history of flight.

Answer the questions below in full sentences.

1. In what county was Harry Ferguson born?

2. What was Harry the first person in Ireland to do?

3. How much money did Harry win in Newcastle?

4. What happened to Captain Valentine Baker?

5. What did James Martin invent?

6. Why is his invention important?

Dictionary Work

Some of the words in the passage are written in bold. Look these words up in the dictionary and write the definitions in your books:

eject

emergency

repair

Answers

1. In what county was Harry Ferguson born?
Harry was born in County Down.
2. What was Harry the first person in Ireland to do?
Harry was the first person in Ireland to fly a plane.
3. How much money did Harry win in Newcastle?
Harry won £100 in Newcastle.
4. What happened to Captain Valentine Baker?
Captain Valentine Baker was killed after trying to make an emergency landing.
5. What did James Martin invent?
James Martin invented a type of ejection seat – the Martin-Baker ejection seat.
6. Why is his invention important?
His invention is important because it has saved many lives.

Dictionary Work

eject	to force out or expel (someone or something)
emergency	a situation needing immediate action
repair	to fix, to restore (something damaged or broken) to good condition

Flight

Harry Ferguson and Sir James Martin

Henry George (Harry) Ferguson was born in 1884 in County Down. He lived on a 100 **acre** farm near Hillsborough. Harry was the fourth of eleven children in his family.

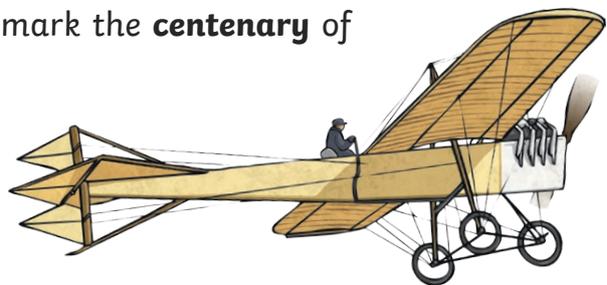
Harry left school when he was fourteen to work on the family farm. He was not keen on farming but really enjoyed problem-solving and mechanics. As he grew older, Harry thought about moving to Canada, but his brother Joe offered him an **apprenticeship** in the small repair workshop he ran in Belfast. This type of work suited Harry much better than farming, so he went to work for Joe.



Harry became interested in flight and enjoyed visiting air shows. The Wright brothers had made the first plane flight in 1903. Harry convinced his brother Joe that designing and building planes would help their business.

Harry began designing and building a plane in 1909. On the very last day of that year, the weather conditions were right for an attempt. The plane took off and flew for about 130 yards. Harry had become the first person to fly a plane in Ireland!

In 1910, Harry flew a plane from Dundrum to Newcastle beach in County Down. The town had offered a £100 prize to anyone who could fly more than two miles. He was able to fly his plane a distance of almost three miles, so he won the prize. If you visit Newcastle today, you can still see a carved stone explaining about Ferguson's famous flight over the beach. In 2010, with everyone keen to mark the **centenary** of Harry's flight, a 'Festival of Flight' was organised in Newcastle. The festival lasted for six days and there was even an amazing display by the famous Red Arrows.



Flight - Harry Ferguson and Sir James Martin

James Martin was born in Crossgar, in County Down, in 1893. He became an engineer and an inventor and moved to England. There he began designing planes and aircraft. The 'Martin-Baker Aircraft Company Ltd' was set up after James became friends with Captain Valentine Baker. On 12th September 1942, during the test flight of an aircraft, Captain Baker was killed. He had tried to make an emergency landing. James Martin was very sad at the loss of his friend. He wanted to use his engineering skills to making flying safer.

Two years later, James was asked to investigate if there was a way for pilots to escape from fighter planes. James decided that the best way to do this would be for the pilot's seat to leave the plane (**eject**). James developed his idea and invented a type of ejection seat known as 'The Martin-Baker' ejection seat. Since this ejection seat, Martin-Baker has had over 7400 successful ejections and many lives have been saved.



Questions

Read the passage about the two men from County Down who are associated with the history of flight.

Answer the questions below in full sentences.

1. In what county was Harry Ferguson born?

2. How many brothers and sisters did Harry have?

3. Why do you think Harry thought about moving to Canada?

4. Why do you think Harry liked the idea of working in a repair shop?

5. What did Harry become the first person in Ireland to do?

6. Why is there a carved stone beside Newcastle beach?

7. Where was James Martin born?

8. What happened to Captain Valentine Baker?

9. What did James Martin invent?

10. Why do you think this was an important invention?

Dictionary Work

Some of the words in the passage are written in bold. Look these words up in the dictionary and write the definitions in your books:

acre _____

apprenticeship _____

centenary _____

eject _____

Answers

1. In what county was Harry Ferguson born?
Harry was born in County Down.
2. How many brothers and sisters did Harry have?
Harry was one of eleven children so he had ten brothers and sisters.
3. Why do you think Harry thought about moving to Canada?
Harry was not keen on farming but he had to work on the family farm.
4. Why do you think Harry liked the idea of working in a repair shop?
Harry enjoyed problem-solving and mechanics so a repair shop would have suited him.
5. What did Harry become the first person in Ireland to do?
Harry was the first person in Ireland to fly a plane.
6. Why is there a carved stone beside Newcastle beach?
The stone explains how Harry flew over Newcastle beach to win a £100 prize offered by the town.
7. Where was James Martin born?
James Martin was born in Crossgar, County Down.
8. What happened to Captain Valentine Baker?
Captain Valentine Baker was killed during the test flight of an aircraft, after trying to make an emergency landing.
9. What did James Martin invent?
James Martin invented a type of ejection seat – The Martin-Baker ejection seat.
10. Why do you think this was an important invention?
His invention was important because it has saved many lives.

Dictionary Work

acre	a unit for measuring areas of land
apprenticeship	period of learning a trade from a skilled worker
centenary	100th anniversary or its celebration
eject	to force out or expel (someone or something)

Flight

Harry Ferguson and Sir James Martin

Henry George (Harry) Ferguson was born on the 4th of November, 1884, in County Down. He grew up on a 100-**acre** farm in the townland of Growell, near Hillsborough and Dromore. Harry was the fourth of eleven children in his family.

Harry left school when he was fourteen to work on the family farm. He was not keen on farming but really enjoyed problem-solving and mechanics. As he grew older, Harry thought about **emigrating** to Canada, but his brother Joe offered him an **apprenticeship** in the small repair workshop he ran in Belfast. This type of work suited Harry much better than farming, so he went to work for Joe.



Harry became interested in flight and enjoyed visiting air shows and **exhibitions**. The Wright brothers had made the first plane flight in 1903. Harry convinced his brother Joe that designing and building planes would benefit their business. Harry wanted to make the first powered flight in Ireland.

Harry began designing and building a monoplane in 1909. The plane was towed to Hillsborough Park, ready for take-off. Propeller issues meant that this first attempt failed. The propeller was replaced, then finally on the very last day of 1909, the weather conditions were right for another attempt. Harry took off and flew for about 130 yards. He was the first person in Ireland to fly a plane.

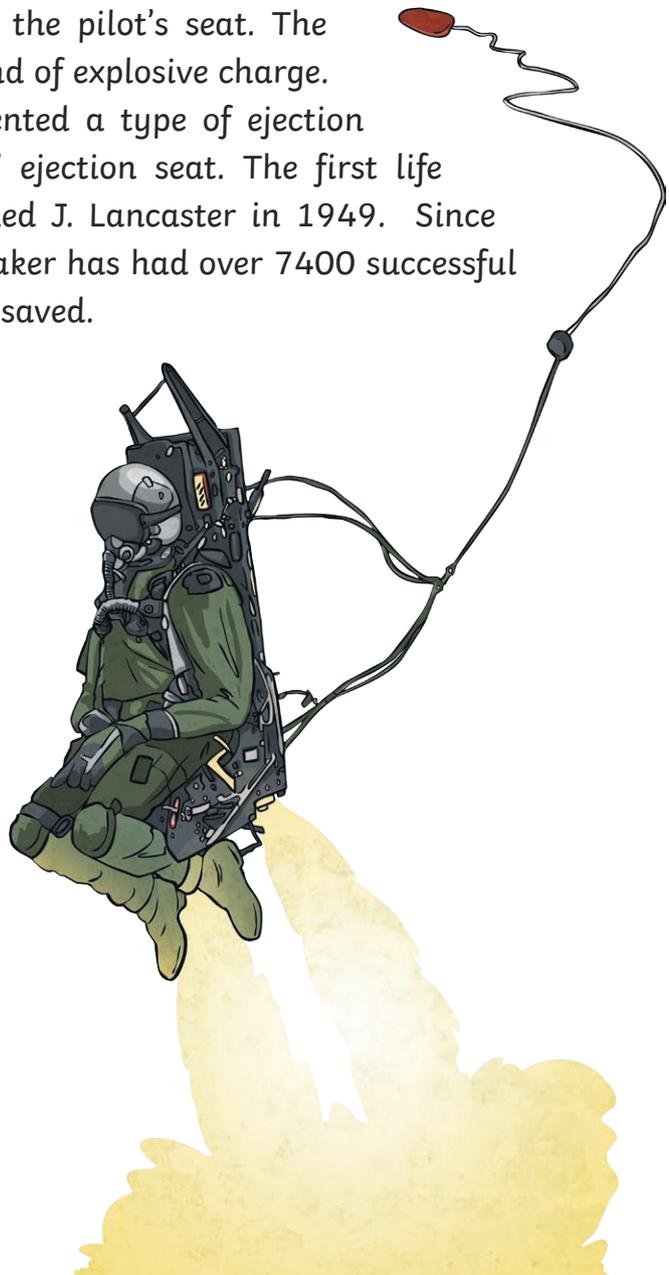
In 1910, Harry flew a plane from Dundrum to Newcastle beach in County Down. The town's Sport Committee had offered a £100 prize to anyone who could fly more than two miles. Harry was able to fly his plane a distance of almost three miles and so won the prize. If you visit Newcastle today and walk along the town's **promenade**, you can see a memorial stone dedicated to Ferguson's famous flight over the beach. In 2010, with everyone keen to mark the **centenary** of Harry's flight, a 'Festival of Flight' was organised in Newcastle.

The festival lasted for six days and included many different flying-themed activities. There was even an amazing display by the famous Red Arrows.



James Martin was born in Crossgar, in County Down, in 1893. He became an engineer and an inventor, and moved to England. There he began designing **prototype** aircrafts. The 'Martin-Baker Aircraft Company Ltd' was established after James became friends with Captain Valentine Baker. On 12th September 1942, during a test flight of an aircraft called the Martin-Baker MB3 prototype, Captain Baker was killed. He had tried to make an emergency landing. James Martin was badly affected by the loss of his friend. He wanted to put his engineering skills to use making flying safer.

Two years later, the Ministry of Aircraft Production asked James to investigate if it would be practical and possible to add a way for pilots to escape from fighter planes. James decided that the best way to do this would be a forced **ejection** of the pilot's seat. The force would be provided by some kind of explosive charge. James developed his idea and invented a type of ejection seat, known as 'The Martin-Baker' ejection seat. The first life saved was that of a test pilot named J. Lancaster in 1949. Since the Pre Mk1 ejection seat, Martin-Baker has had over 7400 successful ejections and many lives have been saved.



Questions

Read the passage about the two men from County Down who are associated with the history of flight.

Answer the questions below in full sentences.

1. Where was Harry Ferguson born?

2. How many brothers and sisters did Harry have?

3. Why do you think Harry considered emigrating to Canada?

4. Why do you think working in a repair shop appealed to Harry?

5. What do you think Harry may have said to Joe to persuade him to let him design and build planes? Write a few sentences that he may have said.

6. Why was Harry's first attempt to fly the plane not successful?

7. What record did Harry earn?

8. What does the stone on Newcastle promenade commemorate?

9. Where was James Martin born?

10. What happened to Captain Valentine Baker?

11. What did James Martin invent?

12. What was the name of the first man whose life was saved by his invention?

Dictionary Work

Some of the words in the passage are written in bold. Look these words up in the dictionary and write the definitions in your books:

- acre

- apprenticeship

- centenary

- eject

- emigrate

- exhibition

- promenade

- prototype

Answers

1. Where was Harry Ferguson born?
Harry was born in Growell, in County Down, near Hillsborough and Dromore.
2. How many brothers and sisters did Harry have?
Harry was one of eleven children in his family. He had ten brothers and sisters.
3. Why do you think Harry considered emigrating to Canada?
Harry was not keen on farming but he was working on the family farm.
4. Why do you think working in a repair shop appealed to Harry?
Harry enjoyed problem-solving and mechanics so a repair shop would have suited him.
5. What do you think Harry may have said to Joe to persuade him to let him design and build planes? Write a few sentences that he may have said.
Answers will vary, an example is: "Joe, I think we should get involved in designing and building planes. It is all so exciting, it would definitely boost our business. We could get a lot of publicity and people will hear about us."
6. Why was Harry's first attempt to fly the plane not successful?
The propeller did not work properly during Harry's first attempt to fly.
7. What record did Harry earn?
Harry was the first person in Ireland to fly a plane.
8. What does the stone on Newcastle promenade commemorate?
The stone commemorates Harry's flight over Newcastle beach, to win a £100 prize offered by the town.
9. Where was James Martin born?
James Martin was born in Crossgar, in County Down.
10. What happened to Captain Valentine Baker?
Captain Valentine Baker was killed during the test flight of an aircraft, after trying to make an emergency landing.
11. What did James Martin invent?
James Martin invented a type of ejection seat – The Martin-Baker ejection seat.
12. What was the name of the first man whose life was saved by his invention?
The first life saved was that of a test pilot named J. Lancaster, in 1949.

Dictionary Work

acre	a unit for measuring areas of land
apprenticeship	period of learning a trade from a skilled worker
centenary	100th anniversary or its celebration
eject	to force out or expel (someone or something)
emigrate	to go and settle in another country
exhibition	public display of art, skills etc.
promenade	paved walkway along the seafront at a holiday resort
prototype	original or model to be copied or developed