

Saving lives in Aviation

By Natalie Drake of the Martin Baker Aircraft Company

Martin-Baker Aircraft Company is a family business based in Denham, Buckinghamshire currently run by joint Managing Directors, Jim and John Martin, twin sons of the late founder Sir James Martin. Martin-Baker have been saving lives since 1946 with their design and production of Ejection Seats. Now employing over 800 people in 2021, Martin-Baker continues to be a captain of industry, securing thousands of aircrew lives with the optimum vision to be the global provider of the world's most advanced ejection seats, crashworthy seats, and associated safety systems.

'Martin's Aircraft Works' was where Sir James Martin originally began his journey in aviation in 1929, with the production of the prototype aircraft, the MB 1. Martin-Baker Aircraft Ltd was later founded in 1934 by Sir James Martin and Captain Valentine Baker to continue the work of aircraft development. However, in 1942, Captain Baker was killed during a MB3 flight test, which prompted the beginning of the Martin- Baker Aircraft Company that we know today. In 1944, Sir James spoke with the Ministry of Defence and began investigating the provision of a means of assisted escape in a fighter aircraft.



Bernard Lynch and Jo Lancaster

Ejection seat testing began in 1945 with Bernard Lynch who successfully completed the first live test ejection, followed by the first mid-flight test ejection in July 1946. The second notable individual is Jo Lancaster who, on 30th May 1949, became the first person to eject from a British aircraft in an emergency. By 1965, 1,000 lives had been saved and the following year Sir James Martin's efforts were recognised by four Queen's Awards for Export Trade and Technological Innovation.

Since then, Martin-Baker have saved more than 7,500 lives, with an ejection seat portfolio beginning with a Pre-Mk.1, to the most recent development of the Mk.18 in 2018. Over 70,000 ejection seats have been delivered to 93 Air Forces around the world and over 17,000 of these seats are still in service. Martin-Baker is a global company with sites not only in the UK but also in Europe, the USA and Australia, with our top customers in India, the USA and the UK. In addition to Ejection Seats, Martin-Baker have also developed a vast range of crashworthy seats that meet the specialist safety needs of helicopters and fixed wing aircraft such as

Mk18 Ejection Seat



JSF Mk16 Seat Test



ability to offer a complete 'end-to-end service' to all our customers via our facilities around the world. Our success has not only derived from our passion for engineering and strong family ties but also an extremely loyal and skilled workforce over the last 70 years.

There comes a great sense of satisfaction when working at Martin-Baker as you are a part of a team designing the next generation of aircrew escape systems as well as being at the cutting edge of aviation innovation. Every day can be an opportunity to be challenged and drive your passion for the industry. Everyone at Martin-Baker has a part in saving lives and the sense of achievement and gratification felt company-wide when a successful ejection takes place is unmatched.

There are many roles and opportunities for school leavers within Martin-Baker across a broad range of departments; these include Apprenticeships, Year in Industry schemes and Summer Placements.

Apprenticeships

During the four-year scheme you will attend college one day a week on average, to study for a nationally recognised Mechanical Engineering qualification (a minimum of BTEC Level 3) as well as receiving a hands-on approach to learning processes and skills that are essential. Another benefit of apprenticeships is that you 'earn while you learn', so as well as receiving training and learning you also receive a very competitive salary.

A typical working day will depend upon the area of the business in which you are placed; however, regardless of where in the business you work, you will be trained by experienced employees who are keen to pass on their wealth of knowledge to the future of our business. Whether you are building sub-assemblies in the Assembly Department, machining parts in the Machine Shop or

specialist rotating, armoured and comfort seats. Our cutting-edge innovation has seen us being selected for various competitions since the year 2000, including the F-35 Joint Strike Fighter and the KF-X Ejection Seat competition, as well as receiving a further seven Queen's Awards for specialisms including Export Trade, Technology Innovation, International Trade and Sustainable Development.

We are the world's leading manufacturer of ejection seats and related equipment, with the

Working for Martin Baker

Martin Baker is one of the most recognised names in Aerospace; the company offers fantastic opportunities for people to join:

Apprenticeships

Apprenticeships are great schemes which combine classroom study and on-the-job learning. For some it can be a great alternative to university and, with Martin-Baker, a solid foundation for a career in manufacturing and engineering.

Year in Industry

Choosing to take a year out of your university course to do a year in industry has many benefits. Taking a year out to work in your industry of choice shows a lot of commitment and helps you stand out from the crowd which may help to increase your employability when you finish your degree course.

Recruiting now in 2021

Martin-Baker have opened their applications now. If you are leaving school or college this year, you can start your path to Martin-Baker right here: <https://martin-baker.com/careers/apprenticeships>

developing and running tests in the Environmental Test Department, you will have a different day every day! Qualifications and desirable requirements are as follows:

- 5 GCSE grades 9-4, or equivalent, in Maths, English Language, and a science subject (i.e., Physics or Chemistry).
- Genuine enthusiasm for manufacturing and engineering. Your CV should show examples of interest in engineering such as any clubs or projects you have been a part of.
- Examples of where you have shown teamwork skills, your experiences and what you learnt about yourself and others.

Year in Industry

Completing a year in industry will provide you with both the soft skills of the workplace as well as the expansion of your technical knowledge of your chosen industry.

To have the chance of completing your Year in Industry with Martin-Baker you must be working towards a minimum 2:1 degree in one of the following subjects:



- Mechanical Engineering; Electrical/Electronic Engineering; Aerospace/Aeronautical Engineering; Design Engineering; Production Engineering; Business Studies; Law.

Placements will be in one of the following departments:

- Mechanical Engineering; Production Engineering; Systems Engineering; Environmental Test; Seat Test; Design Reliability; Quality; Supplier Quality; Programmes; IT; Commercial; Human Resources.

Some of the advantages of choosing to do a Year in Industry are that you will be training for a well-paid career in advance of completing your degree, as well as receiving a competitive salary in addition to various employee benefits.

Summer Placement

The Summer placement programme is a great scheme for anyone looking to gain some valuable experience within the industry whilst they are studying for their degree. We offer a limited number of opportunities in a variety of departments where you will partake in real life workplace experience by working on a project within the Engineering industry.

