

**NURTURING TALENT  
GAINING RECOGNITION  
CREATING POSSIBILITIES**



INTRODUCTION TO THE ISLE OF MAN  
AEROSPACE CLUSTER BY **ADRIAN MOORE**  
CHAIR, ISLE OF MAN AEROSPACE CLUSTER



# YOUR PARTNER IN EXCELLENCE

The Isle of Man Aerospace Cluster's main objective is to create a range of services available to its members to facilitate continuous improvement of their businesses in pursuit of world-class standards.

The cluster is led by a public/private sector committee comprising of the Isle of Man Government's Department for Enterprise, the Isle of Man Chamber of Commerce and the larger Cluster members. This is supplemented by the Cluster's relationship with the North West Aerospace Alliance, which enables our members to gain access to one of the most influential "aerospace hotspots" in the UK.

The Isle of Man Aerospace Cluster has achieved much in its relatively short lifespan. It has quickly become an established part of the UK's Aerospace supply chain and has received recognition within the Isle of Man as an exemplary blueprint of how public and private sector can work together effectively and efficiently.

Perhaps the achievement I am most proud of is the progress that has been made in skills development in the Isle of Man and the positivity that is now generated towards careers in engineering. A programme inspired by Cluster members with Government support with a line of sight that starts in the Island's primary schools and runs right through to an innovative foundation apprenticeship in a multi-million pound training facility is helping the Island to deliver a new generation of engineers equipped to work on the major aerospace programmes we are part of.

With a new three year strategy for growth in place we are now seeking strategic suppliers and partners to help deliver exciting opportunities to our global customer base. Both myself and my team will be delighted to talk to you about the opportunities and incentives there are to work with the Cluster in the Isle of Man. We have a clear vision for the future and are committed to remaining a partner in excellence for our customers.

**DR. DAVID W. BAILEY FRAES**  
CHIEF EXECUTIVE, NORTH WEST AEROSPACE ALLIANCE

## POSITIONING FOR ADVANTAGE

High-tech manufacturing in the Isle of Man has been thriving for over 60 years with the Island's companies covering a range of advanced engineering and manufacturing sectors including aerospace, automotive, energy and space. The aerospace and aviation industry is a priority sector for the Isle of Man's Department for Enterprise which can be clearly recognised by the business support provided in the form of the Isle of Man Aerospace Cluster (IOMAC).

The IOMAC members are positioning themselves to take advantage of rising commercial aircraft deliveries and higher defence spending. Both Boeing and Airbus are increasing commercial deliveries. At the start of 2018, Boeing had a backlog of 4,413 planes for its 737 single-aisle jet, and the company has previously said it plans to boost production to 52 planes per month in 2018 and 57 in 2019. Airbus' backlog now stands at a record high of 7,265 firm bookings, roughly 10 years' worth of work at current delivery rates. Airbus should see its production rate on its A320 single-aisle plane increase, from a rate of 52 aircraft per month in 2018 heading towards 60 in 2019.

Supply chain manufacturers have been making significant capacity investments and are therefore well positioned to meet production rate increases. Yet the risk of supply chain disruptions remains. The ability of smaller suppliers

to make the necessary investments to accommodate almost 120 single-aisle aircraft per month in 2019 could be a concern.

The defence industry outlook is also positive, with military expenditures forecasted to grow for the fifth consecutive year according to Jane's Defence report. The increase in defence spending reflects improving economic conditions around the world, coupled with a response to continuing instability in a number of key regions, which suggests that recent growth primarily relates to improved economic and fiscal conditions in established markets.

The North West Aerospace Alliance is privileged to support the Isle of Man Aerospace Cluster at this time of unprecedented growth in the Aerospace and Defence markets. The IOMAC forums provide the senior leadership teams of the IOMAC members with the opportunity to hear from leading industry and academic speakers about where markets are heading and what customers require in terms of new technology and supply chain performance. A further benefit of the IOMAC forums stems from the growing relationships between the members. One way of meeting the future growth of the industry is going to be through ever increasing collaboration. The North West Aerospace Alliance is certainly committed to increasing our collaboration with the Isle of Man Aerospace Cluster!





**THE ISLE OF MAN AEROSPACE CLUSTER OFFERS COST-EFFECTIVE, JOINED-UP SOLUTIONS FOR ITS GLOBAL BLUE-CHIP CLIENT BASE. WHEN CONSIDERED AS A SINGLE ENTITY, THE CLUSTER IS ABLE TO PROVIDE DESIGN AND MANUFACTURED SOLUTIONS WITH A REPUTATION FOR 'ONE STOP SHOP CAPABILITY' AND ACCESS TO THE KEY SUPPLY CHAINS BOTH IN THE UK AND OVERSEAS AND WE ARE PROUD TO SAY THAT WE ARE PARTNERS TO VIRTUALLY EVERY MAJOR CIVIL AND MILITARY AEROSPACE PROJECT IN THE WORLD TODAY.**

The Cluster supports many other sectors too, including scientific research, oil and gas, space, cutting tools, optics and coatings, motorsport and maintenance repair and overhaul (MRO). As the key driver of precision engineering in the Isle of Man, Cluster members are committed to embedding widely accepted aerospace standards as a benchmark of excellence in everything that we do.

The Isle of Man Aerospace Cluster can supply one-off prototypes and/or full production rate support including full project management and delivery, kitting and assembly straight to build line or integrator.

#### CLUSTER MEMBER COMPETENCIES

- **ANDT**  
Non-destructive testing
  - **Assystem (IOM) Ltd**  
Aircraft design and stress engineers. Civil and Military
  - **Bladon Jets**  
Micro axial flow gas turbine design and development
  - **Coldean Aviation**  
Design house specialising in customer derived aircraft modifications, EASA approval applied for
  - **Compressor Care (IOM) Ltd**  
Compressor installation and maintenance
  - **DHL Express**  
Worldwide tracked and express logistics service
  - **EBIS Engineering and Plastics Ltd**  
Toolmaking and precision engineering/prototyping
  - **Hamblin Employment Group**  
Recruitment
  - **Henson Ceramics/EMC Ltd**  
Manufacturers of ceramic sensors and monitors for molten metal/ metal production processes
  - **ISO QA IOM**  
Quality management consultants  
– AS9100, ISO9100 and all other ISO disciplines
  - **Kiartys Engineering Ltd**  
Precision engineering - prototyping to full batch production in all materials
  - **Manx Precision Optics**  
Specialist optics and coatings for R&D, Space and optronics
  - **Moynihan Precision Engineering**  
Manufacturers of specialist bespoke assembly and product life testing machines, measuring and gauging equipment, non-contact part recognition and measuring vision systems
  - **Precimatic Ltd**  
Precision machined and assembled components
  - **Ronaldsway Aircraft Company Ltd**  
Manufacturers and system integrators. Civil and Military
  - **Swagelok Ltd**  
Design and manufacturing of critical, complex and sensitive mill/turn and prismatic parts/assemblies targeting aero-engine, oil, gas and chemical markets
  - **Target Aerospace/Tools**  
Machine tool supplies and engineering consultancy
  - **Triumph Actuation Systems**  
Components and assemblies for actuation and landing gear
  - **Thriiive**  
Analysis of ERP/MRP operational system data; business improvement actions to maximise effectiveness and profit
  - **West Atlantic Aviation Maintenance**  
Aircraft maintenance, repair and overhaul
  - **Zenith Industrial**  
Engineers' merchants and health and safety stockists
- Due to its success, the Isle of Man Aerospace Cluster is continually seeking new suppliers in but not limited to the following areas:
- **Materials stockholding**
  - **Machine and plant maintenance**
  - **High value metal recycling**
  - **Calibration services**
  - **Heat and surface treatments**
- New businesses are also welcomed that complement the Cluster's existing capabilities and we are interested in the following:
- **Composite manufacturers**
  - **Additive Manufacturing/3D printing/ prototyping**
  - **Avionics, electronics, computer sciences**
  - **New precision manufacturing start-ups with innovative high value products and services**
  - **Mature businesses with expansion plans**
- The Isle of Man can provide a number of sources of funding both via the Department for Enterprise and venture capitalist initiatives
- Contact [iomac@gov.im](mailto:iomac@gov.im) to find out more**



# AN ISLAND OF ENTERPRISE AND OPPORTUNITY FOR AEROSPACE MANUFACTURING

The Isle of Man is proud to be home to a thriving aerospace manufacturing sector which dates back to the 1950s. A spirit of co-operation and support has prevailed between businesses and between businesses and the Isle of Man Government, which means that despite the Island being a small nation, we have become an integral part of the UK supply chain.

The Isle of Man prides itself on being an Island of enterprise and opportunity. An essential component of this is the supportive business environment featuring zero-rated corporate tax for manufacturing businesses, highly resilient telecoms and power infrastructures and a safe location for IP-sensitive products.

The Isle of Man Government also offers a comprehensive package of financial support to encourage new businesses to start-up on the Island, help existing businesses to grow and to encourage investment in new technologies and working practices in order to improve companies' efficiency and competitiveness.

The Financial Assistance Scheme is an important tool to encourage existing businesses to adopt new technologies and practices and for new businesses to develop on the Island.

A £50 million fund is also available under the Enterprise Development Scheme, aimed primarily at creating new jobs by supporting businesses at all stages of the growth cycle. The scheme offers grant, loan and equity investment to new start-ups, existing expanding businesses and businesses wishing to relocate to the Island.

Visit [www.iomdfenterprise.im/funding-and-support](http://www.iomdfenterprise.im/funding-and-support)



## SELF-GOVERNING & STABLE

Our years of experience and the Aerospace Cluster model offer businesses stability and support growth

Part of the North West Aerospace Alliance, one of the most active and influential aerospace clusters in Europe

"One Stop Shop" capability through established Island supply chain

Quality and process excellence underpinned by AS9100

Quarterly IOMAC forums and international missions providing networking opportunities

70-year heritage

Isle of Man Aerospace Cluster (IOMAC) established for over **10 years.** Led by a public/private sector committee



## STRONG IDENTITY

Our companies are truly world class and endorsed by the global industry

21

industry winner or finalist awards for IOMAC members since 2006

Isle of Man companies partner to virtually every major civil and military project in the world, and contributors to renowned global aerospace projects:

Civil and defence projects for Airbus, Boeing and NASA

Components supplied for A380, 787 Dreamliner, Joint Strike Fighter, A400M Military Transporter

Landing gear systems for all Airbus A320s

Ejection seats used in the Red Arrows aircraft



## FIRST MOVER

Our aerospace sector is innovative and committed to breaking new ground

First

British Aerospace Cluster to launch a dedicated programme to address the sector skills gap, Awareness of Careers in Engineering (ACE)

## Home to the International Institute of Space Commerce.

dedicated to the study of the business, economics, and commerce of space



## VIBRANT BUSINESS CENTRE

Our Aerospace Cluster has a proven track record and is growing

300

skilled jobs expected to be added by IOMAC members in the next five years

885

strong aerospace manufacturing workforce

19

companies spanning aerospace design, manufacturing and service provision

25%

average growth of IOMAC members between 2008 and 2015

30%

increase in IOMAC member employment in the last 10 years



## ADVANCED INFRASTRUCTURE

We have strong connections that businesses can depend on

### Well-connected.

Resilient telecoms and power infrastructures

Established logistics links with key markets in UK, Europe, Asia and USA

### Safe location for IP-sensitive products.

IP legislation is in line with the UK's



## FINANCIALLY REWARDING

We offer a capital-efficient environment for businesses to grow, develop and prosper

Cost-effective solutions via the IOMAC model

IOMAC members expect to double turnover in the next five years





**NICK ONYEMEM**  
General Manager

# EXCELLENCE BY DESIGN



## 1. What is the history of Kiartys Engineering?

Kiartys Engineering was formed as a dual-sited company in February 2017 following the purchase of two formerly independent and successful Isle of Man engineering companies - Manx Engineers and Kiartys Limited. That means that within Kiartys Engineering's history is over 20 years of experience developing and manufacturing precision components for some of the world's key industry leaders. Since its formation, Kiartys Engineering has grown from strength to strength, investing in new machinery, growing its current customer base with new and exciting opportunities and attracting new customers thanks to its excellent performance and competitive approach to continuous improvement and automation. Kiartys Engineering can continue to look forward to further progress including the consolidation of both sites into a new facility in its not too distant future.

## 2. What do you manufacture and in which sectors are your customers?

We machine complex metal components that perform in the most demanding environments. So whatever the application, aircraft engines, military applications, oil and gas sub-sea piping, we are capable of providing the required solutions for our customers. We machine, assemble and kit products for the Aerospace, Military, Oil and Gas industries to name a few.

## 3. What are the positive reasons for basing the operation in the Isle of Man?

The Isle of Man is an excellent location for any engineering company. Its infrastructure and Government support programmes are tailored towards supporting engineering companies technically and commercially. I cannot

speak highly enough of the way the Isle of Man has set itself up to make things as easy as possible for businesses thereby promoting the success of its island-based companies.

## 4. In what ways is the Isle of Man Government supportive of manufacturing?

First of all, bureaucracy or more importantly the lack of it. If I need to discuss an opportunity to invest in the business and need advice on the best routes to take for funding or support, I pick up the phone and within seconds, I am speaking to the relevant decision maker. As a business leader, I cannot tell you how refreshing that is. Couple that with the Government's commitment to promoting manufacturing within schools on the island and its progressive support of the island's apprenticeship programme, companies can be assured of having the necessary tools at their disposal to thrive and succeed.

## 5. Why do you consider involvement with the Isle of Man Aerospace Cluster important and what benefits does Kiartys Engineering get from being a Member?

The Isle of Man Aerospace Cluster provides a collaborative environment for its members from the smallest contractors to largest multi-nationals enabling networking, learning about industry trends, opportunities and threats affecting the Aerospace sector. One area that the Aerospace Cluster provides most benefit to Kiartys Engineering is its ability to leverage areas like transport costs on and off the island. It is a constant challenge to reduce costs and it is beneficial to have a resource like the Isle of Man Aerospace Cluster helping you do so.

## COMPANIES A-Z



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