

# The Doorway<sup>TM</sup>

M.C. Gill Corporation Group of Companies

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GLOBAL  
PRESENCE



# Global Presence

During the past two decades, the aviation industry has undergone significant changes which have influenced M.C. Gill Corporation's business strategies. The introduction of next-generation aircraft has created a necessity for new product development geared to superior weight and performance characteristics. Increasingly competitive market conditions have driven the implementation of Lean Manufacturing, Value Engineering and Just-In-Time delivery initiatives. Perhaps, most notably, the aviation industry has transformed into a contemporary business model that is shaped by international cooperation, global partnerships and worldwide networks.

In today's business environment, it's not enough to offer OEM-qualified products, having superior

quality and competitive prices. An organization must also have an established global network to support business from both a technical and logistics perspective. As a corporation with a heritage of superior service and quality, we recognize the importance of continuously adapting to market requirements to ensure efficient and effective levels of performance. This year, as we commemorate our 60th anniversary as a preferred supplier to original equipment manufacturers, airlines and maintenance, repair and overhaul facilities throughout the world, we pause to reflect on our historical journey from a small pioneering operation in 1945 to a globally recognized leader in the design and manufacture of advanced composite materials.



## M.C. Gill Corporation Group of Companies

The past decade has marked a period of strategic acquisitions for M.C. Gill Corporation which have resulted in expanded engineering, manufacturing and distribution operations in North America and Europe. In addition to enhancing our product line, these subsidiaries enable us to offer customers a broader range of value-added services. With aircraft manufacturers continuously seeking to offload fabrication work to concentrate on their core business, expanding capabilities has become an integral part of our business strategy. These acquisitions have also led to the establishment of centers of excellence within the M.C. Gill Corporation Group of Companies to better serve our worldwide customer base.

## M.C. Gill Corporation Europe Ltd.

In 1997, M.C. Gill Corporation Europe Ltd., joined the M.C. Gill Corporation Group of Companies following a longstanding partnership in supporting OEM programs. As specialists in composite detailing and fabrication, with a proven track record in supporting OEM, spares, maintenance and conversion programs, our combined competencies were a clear business fit. Recognizing the long-term growth potential for value-added materials and the need to establish a European distribution center for M.C. Gill products, a new state-of-the-art facility was opened.

Today, M.C. Gill Corporation Europe Ltd., operates as our European center of excellence for fabrication, detailing and assemblies under CAA/JAR 21 approval. Located in close proximity to Belfast airports, with overnight links throughout Europe, this facility also serves as our European distribution center, offering JIT delivery on an extensive range of M.C. Gill products.



## Technical Support Matt Lowry R&D Director

Passenger-to-Freighter conversions have become a growing segment of the commercial aviation market in recent years, driven by a marked growth in airfreight traffic, an increasing number of passenger aircraft approaching the “zone of convertibility” and the necessity for operators to modernize aging fleets. Ranging in size from small regional

aircraft to jumbo jets and configured for bulk or containerized cargo, these aircraft often require customized cargo liners and floor panels to meet unique and exacting requirements. With converted aircraft representing seventy-five percent of freighters worldwide, operators and conversion facilities are continuously looking for cost-effective, durable products designed to withstand the most stringent in-service conditions.

Whether a particular application is best supported by an existing M.C. Gill product or requires an innovative new design, our team of experienced engineers, chemists and sales representatives bring M.C. Gill Corporation’s many years of experience to bear in offering our customers the most cost-effective solutions. As a manufacturer with a longstanding history in supporting freighter aircraft, M.C. Gill Corporation has developed a broad spectrum of products which enable us to offer our customers optimum product solutions. While many of these designs are OEM-qualified and support production aircraft, we also offer a complete line of proprietary products that have been developed in specific response to customer requests and needs.

An example of M.C. Gill Corporation’s technical support occurred recently for a customer in Europe. A small regional carrier operating a fleet of converted ATR 42 and 72 freighters contacted M.C. Gill in need of assistance. The requirement of short hauls and repeated loading and unloading of bulk freight put a severe demand on their existing floor panels resulting in extensive impact damage. A more robust floor panel was needed to support the rigorous in-service conditions and eliminate the necessity for costly maintenance and down time.

Following this initial contact, a technical review meeting was scheduled with the operator and converter. The meeting included technical and manufacturing expertise from M.C. Gill Corporation, where a range of design alternatives were presented, culminating in an agreement between the converter and operator to incorporate the new design at the next maintenance check. Not surprising, the product selected was a derivative of Gillfab™ 5007C, which was developed over three decades ago for a major freight operator. This product offers superior durability, including excellent impact and abrasion resistance, backed by a proven history of in-service performance. Moreover, this proprietary design can be custom tailored to meet specific performance criteria. Within the few intervening months, engineers in M.C. Gill Corporation’s El Monte, California division had developed the alternate construction and demonstrated that it met or exceeded all of the customer’s requirements.

Panels were manufactured in El Monte and shipped to M.C. Gill Corporation Europe, LTD., in Northern Ireland, for fabrication and detailing. When the plane came in to the converter for its scheduled check, existing panels were removed and sent to Northern Ireland, where M.C. Gill Europe mechanics created templates and drawings for machining the replacement floor panels. Within a week, the converter received panels ready to install in the airplane. The turnaround time for the conversion was remarkable; another testimonial to the strong alliances built by M.C. Gill Corporation’s Group of Companies with their customers around the globe.

## Castle Industries

In 1998, Castle Industries was acquired by M.C. Gill Corporation, further expanding our portfolio of products and capabilities. Although our legacy has been in the research, development and manufacture of fiber reinforced advanced composites, we recognize that the demand for metallic components and assemblies in the aviation sector remains considerable. In many cases, systems and assemblies are still designed using a combination of advanced composites and metallic components. Our combined capabilities offer customers a complete design solution.

As specialists in precision sheet metal fabrication, from initial design and development to commercialization, Castle Industries has established itself as a preferred supplier to numerous OEM programs. Their core products include machined components and assemblies, electronic equipment racks and commercial aircraft seating for crew, observers and attendants.

## Alcore Inc. and Alcore Brigantine

In 2001, Alcore Inc. (USA) and Alcore Brigantine (France) became part of the M.C. Gill Corporation Group of Companies following a longstanding relationship as our preferred source of supply for aluminum honeycomb. As an organization committed to vertical integration, this acquisition satisfied two key business objectives: to bring the manufacture of aluminum honeycomb in-house; and to expand our honeycomb capabilities to support the increasing market demand for a wide range of value-added services including machining, profiling and heat forming. With facilities in North America and France, we are well positioned to support major airframe programs both domestic and international.

Today, Alcore Inc. and Alcore Brigantine operate as our centers of excellence for the machining, profiling and heat forming of non-metallic and metallic honeycombs. These facilities support major OEM programs with aircraft structure sub-assemblies such as flaps, slats, spoilers, rudders, ailerons, and engine nacelles.

## Logistics Support

The dynamic nature of today's aviation industry requires that M.C. Gill Corporation continually identify innovative solutions to meet our customers logistics needs. The recent trend toward reduced inventories and "lean" initiatives has created an unprecedented demand for shorter lead times, vendor managed inventories and a streamlined supply chain. While M.C. Gill Corporation has historically supported some of the shortest manufacturing lead times in our industry, we recognize that each business sector (e.g. Original Equipment Manufacturers, Airlines, and Maintenance Repair and Overhaul) is unique in its logistics requirements. Consequently, we have established numerous models for supporting material

## SR Technics - Switzerland

M.C. Gill Corporation is proud to have been a supplier to SR Technics Switzerland for many years – in fact they were one of our first customers outside the USA beginning in the early 1960s. The success of this long-term relationship was exemplified recently when we were asked to help our customer with a problem.

Martin Canning takes up the story:

*I received a call from Kurt Meyer, the Raw Material Buyer, on 18 January asking for help with an urgent shipment of floor panel and liner materials. This arose because the aircraft they were working on at the time was in far worse condition internally than*







requirements which can be further tailored to meet a specific customer's criteria. These models include local warehousing, consignment inventory, dedicated stock and exclusive distributorships. Today, with the exception of Antarctica, such arrangements can be found supporting key customers on every continent in the world.

## Worldwide Representation

Strong business relationships are fundamental to the success of any organization and M.C. Gill Corporation is no exception. Throughout our history, we have worked closely with our customers providing the personal service and support that distinguishes us from other manufacturers. By getting to know our customers and their business, we are able to offer optimum solutions to their most challenging requirements.

In order to maintain our high standards of customer support around the globe, M.C. Gill Corporation offers a worldwide organization of representatives that make up our sales and service network. These trained and experienced professionals keep us close to our customers, not only from a logistical point of view but also in terms of reacting quickly to technical and commercial issues.

For the current listing  
of our representatives and products  
check out our website:  
[www.mcgillcorp.com](http://www.mcgillcorp.com)

*had been expected, and the customer was anxious to receive the aircraft back on time by 30 January. The liner problem was solved by use of one of our permitted alternative materials, but the floor panels were more problematic. We did ship half the requirement the same day as the call, but then had to find the rest. We searched the OEM specification for alternative materials that could be used and also contacted all our other customers around the world who used this particular product. Unfortunately, none of them had any stock available.*

*At the same time, Production in El Monte was pulling out all the stops to obtain raw materials, make honeycomb, prepreg and then panels. The best shipping date we could give Kurt was 28 January, which allowed no time to turn the raw sheets into finished panels. The result of a superb effort by Production was the 15-sheet balance of the order was shipped on 25 January.*

*When he heard of this early shipment Kurt said "Great news. Many thanks to you – and to the fantastic crew of M.C. Gill in El Monte."*

*Admittedly, this meant some long hours in Zurich finishing the aircraft, but it was re-delivered on time to SR Technics Switzerland's customer. A good result for all of us involved.*

*It's been a pleasure to work with Kurt during my four years with M.C. Gill. But now he's decided to retire and will be missed by all of us that have known him.*

Kurt Meyer has been with Swissair/SR Technics Switzerland for almost 30 years, knows the industry thoroughly and is well known by his many suppliers. It will be quite a task for his successor, Torsten Popp, to fill the space Kurt leaves, but we at M.C. Gill look forward to working with him and continuing the long tradition of supporting our long-established MRO customers.



Precision Conversions Teams  
with M.C. Gill Corporation for

# 757 Conversions

**M.C. Gill Corporation** is supplying Precision Conversions with panels and cargo liner for their Boeing 757 freighter conversion program.

Brian McCarthy, VP Sales and Marketing for Precision Conversions said, “We selected M.C. Gill Corporation products because they are available anywhere in the world. They are a globally known brand and a favorite with customers and people who keep airplanes flying.”

Precision Conversions selected the Boeing 757 for freighter conversions because it is a reliable and flight-efficient aircraft that has proven itself both in the hangar and in the air. The two man crew, fuel efficiency, range and high altitude/hot climate performance of the 757 makes it a solid replacement for the older 727 and DC8 fleets. These qualities make it a workhorse air freighter, which is already predicted to grow in popularity with forecasts of potentially 200 conversions in the years ahead.

“With nearly 1,000 Boeing 757s flying, there will be an ample supply of these aircraft available for conversion for years to come. We look forward to working with M.C. Gill Corporation on these conversion projects and appreciate their high-quality products and superior service,” Brian McCarthy added.



# Customer Base Increase Boosts Northern Ireland's M.C. Gill Corporation Europe Ltd. Operation



For additional information on  
M.C. Gill Corporation  
Europe Capabilities:

Customer Service  
M.C. Gill Corporation Europe, Ltd.  
[sales@insoleq.co.uk](mailto:sales@insoleq.co.uk)

Bangor, Northern Ireland – M.C. Gill Europe Ltd., announced an increase in its distribution business customer base of nearly 25% during 2004. The facility stocks floor panels, cargo liners, insulation bags and related products for the M.C. Gill Corporation Group of Companies. Additionally it machines panels and honeycomb for customers, including floor panels to support Airbus, Raytheon, Gulfstream, BAe and Passenger to Freighter conversion programs.

“We know that in this competitive environment, quality and timely delivery are more important than ever for customers. So, it is truly a vote of confidence that new customers continue to rely on M.C. Gill Corporation Europe for their floor panel and cargo liner needs,” said Martin Canning, Director of European Sales & Marketing.

From its strategic location, M.C. Gill Corporation Europe regularly supplies products to companies throughout Europe, including Greenland and Scandinavia to the north, east to the Slovak Republic and Hungary, and across the Mediterranean region to countries as far afield as Israel and the Gulf States.

M.C. Gill Corporation Europe Ltd., is located in Bangor, County Down in Northern Ireland, 14 miles from Belfast, close to both the City and International Airports and to fast-ferry links to the U.K. mainland. The company has been serving the aerospace industry since 1984 and has an exceptional track record of supporting OEM, spares and maintenance programs.

# CONVERSION



CASTLE INDUSTRIES METAL PARTS

## SUPPORT

### BOEING 747-400 CONVERSION PROGRAM

Castle Industries of California provides complete support for fabrication of precision assemblies, machined metal components and formed sheet metal parts.

Castle is now supporting Boeing's 747-400 Special Freighter, a program to convert passenger airplanes to freighters. These conversions will allow air cargo operators to take advantage of the growing air freight market. The first 747-400 Special Freighter is scheduled to be delivered in December 2005.

Castle Industries has already received purchase orders for 89 individual components or assemblies and has received contracts for an additional 42 part numbers.

If a piece of metal can be formed, machined, cut, pressed, punched, jogged, shaped, welded, profiled or fabricated into a high performance part, Castle has the equipment and experience to do it. Castle Industries is Part of the M.C. Gill Corporation Group of Companies.

For Additional Information: Valerie Williams – Customer Service Manager, Castle Industries, Inc.,  
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## Introduces New Aircraft from IAI

The first G150 jet aircraft developed at the Israel Aircraft Industries (IAI) manufacturing facility in Tel Aviv, Israel, has been introduced. The new model officially rolled out on January 18th to great fanfare.

The G150 uses M.C. Gill Corporation products including finished floor panels that were machined by its subsidiary, M.C. Gill Corporation Europe Ltd., facility in Northern Ireland. These detailed panels have carbon skins with Nomex® honeycomb core, giving them the perfect combination of strength and light weight in this application.

# G150 ROLL OUT



The G150 can reach speeds of up to Mach .85 and altitudes of 45,000 feet, well above commercial traffic and weather. At a long-range cruise speed of Mach .75, the G150 can fly four passengers nonstop up to 2,700 nautical miles, longer than any other aircraft in its class. This distance is equivalent to a Los Angeles to New York, London to Moscow or Rio de Janeiro to Santiago journey.

Gulfstream Aerospace, a subsidiary of General Dynamics, teamed with IAI to create this wide-cabin, high-speed G150 business jet aircraft. The G150 aircraft remains on schedule for customer deliveries in the third quarter of 2006.

M.C. Gill Corporation is proud to be a supplier supporting the success of the G150 program.



# GILL SHOTS



Boeing visitors Chuck Partridge, Tom Blanchard, Mike Green, Ken Prince and Jodi Charlton with M.C.

Mr. David Shmaiser, Chief Designer and Manager with Israel Aircraft Industries, visits to witness qualification testing of G150 floor panels.



Working on a Solar Car Project these CalPoly Pomona students stopped by to learn about sandwich panel construction.



Lyle Hevern has served as Mayor of Estherville, Iowa for over 20 years. M.C. grew up a few miles away in Terril, Iowa, and stays in touch with Mayor Hevern and others in that corner of his home state.



## ISO 9001 and AS9100 Certification for M.C. Gill Corporation

A robust and comprehensive quality system is integral to world-class manufacturing and to this end, M.C. Gill Corporation is dedicated to continuously advancing our quality organization to meet industry standards. Historically, major aerospace companies have established and maintained their own quality system requirements. The recent inclination toward a worldwide supply chain, however, has underscored the need for a globally harmonized standard. M.C. Gill Corporation's recent certification to AS9100:2004-01 and ISO 9001:2000 endorses this goal.

Developed through the joint efforts of the International Organization for Standardization (ISO), the American Aerospace Quality Group (AAQG), the European Association of Aerospace Industries (AECMA) and the International Aerospace Quality Group (IAQG), AS9100 is written within the framework of ISO 9001 but with supplemental

## CERTIFIED MEETING QUALITY SYSTEM REQUIREMENTS

**ISO 9001:2000**  
**AS9100:2004-01**  
Registered

requirements to address the needs of aerospace manufacturers worldwide. Where feasible, AS9100 standardizes the aerospace industry's quality system requirements. Certification to this standard benefits both the customer and supplier by reducing or eliminating the requirement to perform independent quality audits.

"Quality is an ongoing, continuous system of making improvements in everything we do," said Phil Giffin – Director of Quality. "Both ISO and AS certification are significant milestones in anticipating the future needs of our valued customers around the globe."

## The M.C. Gill Corporation Group of Companies



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*Alcore does not sell sandwich  
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## THE FUNNY SIDE

Some tourists in the Chicago Museum of Natural History were marveling at the bones of a reconstructed dinosaur. After ogling these for a time, one of them asked the guard, "Can you tell me how old the dinosaur bones are?"

The guard thought for a moment then replied, "They are 3 million, four years, and six months old."

"That's an awfully exact number," says the tourist. "How do you know their age so precisely?"

The guard answers, "Well, the dinosaur bones were three million years old when I started working here, and that was four and a half years ago."

★ ★ ★

Be careful when filling out a job application. Applying for a job one time, Maurice saw that the employment form clearly said: "Age of Father, if living" and the same query for his Mother.

He put down the numbers 121 and 126 in the spaces provided. Startled, the interviewer asked if his parents were truly that old. He replied, "No, but they would be if they were still living."

★ ★ ★

A lady's husband took her camping for the first time. At every opportunity, he passed along survival lore about the great outdoors. One day they became lost hiking in dense woods. While he tried his usual tactics to determine direction, such as moss on the trees (there was none), direction of the sun (it was an overcast day) or anything else he could think of, it became clear that he couldn't find his way.

Just as the lady was beginning to panic, the man spotted a small cabin in the distance. He pulled out his binoculars, studied the cabin, was suddenly able to orient himself and led them

right back to camp. "That was terrific," the lady said. "How did you do it?" "Simple," he replied. "In this part of the country all the TV satellite dishes point south."



## Trivia

The first people to winter on the Antarctica ice were in a British-funded team under the leadership of Carsten Egeberg Borchgrevink, a Norwegian. The 10 men (three British, five Norwegian, and two Finns) lived in two camps at the base of Cape Adare from March 1899 to January 1900.

★ ★ ★

Jules Dumont d'Urville, in addition to exploring the coast of Antarctica, discovered the statue, Venus de Milo, and brought it to France.

★ ★ ★

The first newspaper on Antarctica was the South Polar Times, published by Scott's expedition each month. Ernest Shackleton was the editor and printer. Submissions were solicited from all members of the group.

Lt. Charles Wilkes was given the command of the U.S. Exploring Expedition in 1838 for America's first official expedition to include Antarctica. During his expedition 62 men were discharged as unsuitable, 42 deserted and 15 died.

★ ★ ★

If completely melted, the present Antarctic ice sheet houses enough water to raise the global sea level by 200 feet.

★ ★ ★

Antarctica is depressed more than half a mile to near sea level under the weight of ice.

**Who was the heaviest president? Who was the lightest?**

Heaviest: William Howard Taft, who weighed more than 300 lbs. He was said to have installed a special bathtub in the White House that could fit four normal sized men. Lightest: James Madison at about 100 lbs.

★ ★ ★

**Which presidents were related?**

There have been two sets of presidents who were father and son: John Adams and John Quincy Adams, and George Bush and George W. Bush. Other presidents who were related: William H. Harrison and Benjamin Harrison were grandfather and grandson. James Madison and Zachary Taylor were second cousins and Theodore Roosevelt and Franklin D. Roosevelt were fifth cousins.