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50 Years of Progress

THE M.C. GILL DOORWAY

"We try hard enough to make it happen"

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Shown below are M.C. Gill with sons Stephen and Phillip. As a team, the three of them are an extension of the company's philosophy, "We try hard enough to make it happen."

Stephen Gill graduated in 1965 from the University of Southern California where he majored in Industrial Management and began his career with the company the same year. He has held the titles of production manager, marketing manager, and general manager. In 1982, he was named president of the corporation and became CEO in 1991.

Philip Gill earned his degree in Chemical Engineering at Oregon State University in 1967. He joined the firm the same year. He served as Director of R & D for many years and, among his many other achievements, was responsible for developing the manufacturing capability for honeycomb. In 1992, he was named President of our Royal Plastic division.

It started with a product... and no idea of where to sell it.

But, almost at first glance, M.C. Gill saw a product he believed in—a fiberglass cloth reinforced plastic structural laminate with the following unusual features: high strength coupled with light weight and resistance to corrosion, fatigue and puncture.

So strong was his belief in this product, he struck out on his own and founded a company to produce it. There was only one minor snag. He had no idea who would buy or use the product.

Undaunted, M.C. originally targeted the post-war consumer marketplace, e.g., wallcovering, place mats, and lamp shades. Ultimately, he found the niche — his product line was ideally suited for commercial aircraft.

The industry was at a turning point. Flying was becoming an increasingly accepted and even demanded mode of travel. Passenger planes were becoming larger and faster. The strong, light weight, puncture-resistant material, for which Gill had sought a market, was the perfect answer to the airlines new demands for lighter equipment with no loss in strength.

As the industry grew, the M.C. Gill Corporation kept pace. The following pages cannot possibly list all the events in the company's history that has placed and kept it in the leadership position it has enjoyed for so many years. Rather, we have tried to highlight those events that made major contributions to the company's success — products that were and are riding the technology crest, technology breakthroughs, increasing levels of vertical integration, and facility location changes.

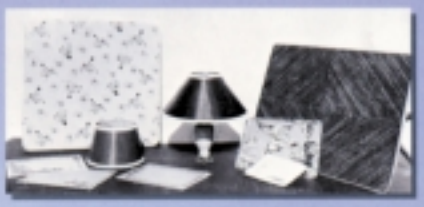
In addition, we have highlighted in bold face type those product innovations that the company either initiated on its own or developed in response to a customer's request. Not all of them were successful but the number, effort, and investment expended are indicative of the extent to which the company will go to satisfy its customers' demands for new and improved products. All of these milestones and innovations have enabled our organization of well over 200 highly experienced department heads, research technicians, production and marketing people to continually provide quality products, in a timely fashion, at a competitive price.

The company now observes our 50th year of growth in the reinforced-plastics business — the oldest continuous operating manufacturer of its kind in the world. We enjoy the distinction of having sole ownership remain with the Gill family from its founding.

50 Years of Progress 1945 to 1952

Montebello Blvd., Montebello, California. Garage plus one expansion plus one small building — from 400 sq. ft. to 1,200 sq. ft.

MILESTONES AND INNOVATIONS
- First products: acrylic glass cloth, lamp shades, place mats, Wallfab.
- First cargo liner sale–to Convair for the 440 and 640.



Some of the company's early products: lamp shades, place mats, wall coverings, trays and table tops.

Convair 440, the first commercial aircraft to use M.C. Gill cargo liner.

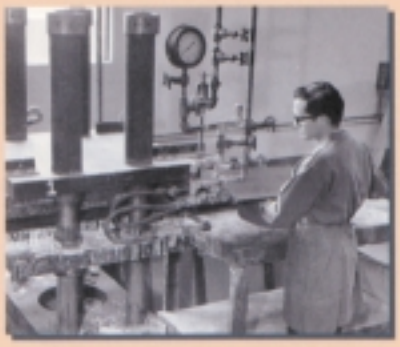
Interior of Lockheed Electra freighter conversion using M.C.Gill cargo liner.

Gillfab 1009, a nylon cloth/acrylic resin laminate used as edging to provide strength for attachment to aircraft.

50 Years of Progress 1952 to 1955

Truck Way, Montebello California. Quonset hut plus one sheet metal building 2,000 sq. ft. expanded to 5,500 sq. ft.

MILESTONES AND INNOVATIONS
- Cargo liner qualified and first sale made to Douglas–for the DC-6 and DC-7.
- Cargo liner qualified at Lockheed.



Press 1, the company's first hydraulic press now used in the R & D lab for prototype products.

"What'll you have?" Pabst Brewing chose side-opening roll-up doors of fiberglass developed by M.C. Gill Corp. for Pabst and their fleet of beer trucks.

Mechanic installing M.C. Gill cargo liner.

Douglas DC-6 (above) and DC-7 (below), two of the first commercial passenger aircraft to utilize M.C. Gill products as original equipment, one of which was Gillfab 1018 cargo liner.

50 Years of Progress 1955 to 1960

Potrero Avenue, South El Monte, California. 6,000 sq. ft. expanded to 14,000 sq. ft.

MILESTONES AND INNOVATIONS

- Gilflab laboratory counter tops developed and introduced.
- First M.C. Gill sale of cargo liner for jet aircraft made to and qualified at Douglas for the DC-8.
- First M.C. Gill sale of cargo liner to a commercial airline—Swissair.

Gillab® 990C used for lab counter tops at the 17 story University of California Medical School in San Francisco.

M.C. Gill products used for these puncture and vandal proof, ground mounted freeway signs.

Disneyland asked us to design lightweight and very durable doors for their "It's a Small World" exhibit. We produced these **3" x 8' x 20' panels** to meet their need.

An M.C. Gill sandwich panel used as a **compartment divider** for TWA.

50 Years of Progress 1960 to 1966

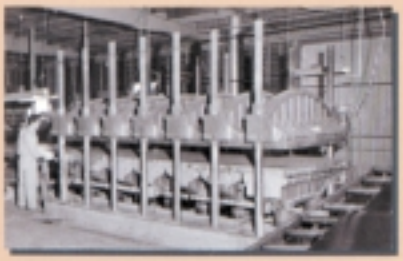
Building 1, Easy Street, El Monte, California. 25,300 sq. ft.

MILESTONES AND INNOVATIONS

- First end-grain balsa wood core sandwich panel (5007) produced.
- First airline sale of Gillfloor 5007A made to United Airlines.
- Gilliner 1066 introduced; became the benchmark for high performance polyester cargo liners.
- First issue of the M.C. Gill Doorway published.

APOLLO environmental control unit is assembled in clean room by Garrett-AiResearch technician. On left are two rectangular lithium hydroxide adsorbers which contain M. C. Gill laminated fiberglass housings.

The fiberglass panels the Los Angeles Department of Water and Power asked M.C. Gill to provide are shown in color. Originally designed to last 20 years, the **original panels** are still in place 31 years later.



Press 2, at one time the largest of its kind in the world, is still in operation on a daily basis.

United Airlines employee installs **Gillfloor® 5007A** with glass cloth polyester facings and end grain balsa wood core.

U.S. Army assault vehicle sits atop a **modular M.C. Gill Air Drop Pallet.**

50 Years of Progress 1966 to 1974

Buildings 2 and 3, Easy Street, El Monte, California. 38,250 sq. ft. added. (63,820 sq. ft. total).

The R & D Lab comes of age.

MILESTONES AND INNOVATIONS

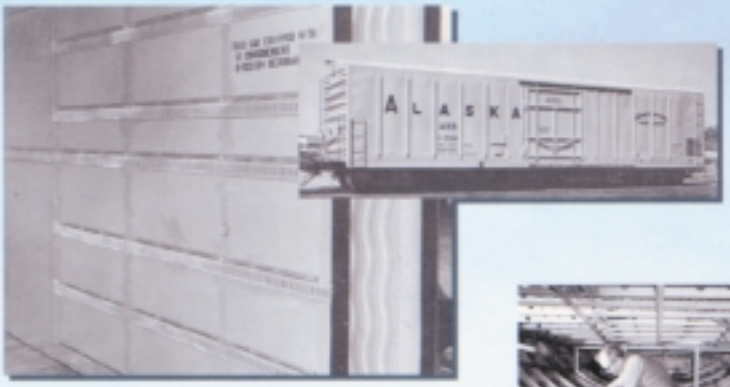
- Gilliner **1100G** adopted as original equipment by Douglas for the DC-9.
- Gilliner 1366 adopted as original equipment for all Boeing and Lockheed passenger aircraft.
- Research and development begun on phenolic resin based products.

U. S. Air Force C-9A hospital plane. The flooring area inside the door (left) is a 5007 modification. The top facing is a lightweight, durable, non-slip fiberglass whose surface is imbedded with sand.

Gilliner 1438 being installed in 747 freighter conversion.

Gil cargo liners used for original equipment in this 737and other Boeing aircraft.

Lockheed L-1011's used **Gillfab® 1138** cargo liner as original equipment.



Gilliner 985, a 1/32" glass mat bonded to exterior grade plywood, was made especially for Alaska Railroad to line the interiors of their refrigerated boxcars. The cars carried fresh and smoked meats, vegetables, and other produce.

Gilliner 1266 being installed as flooring in a Boeing 737.

DC-9 and DC-10 both used M.C. Gill Corp. cargo liner as well as passenger and cargo compartment flooring as original equipment. **Gillfab 5166** served as replacement flooring for the DC-9.

50 Years of Progress 1974 to 1980

Building 4, Easy Street, El Monte, California. 38,640 sq. ft. (102,460 sq. ft. total).

United Airlines ready-for-loading LD3 cargo containers constructed, in part, from puncture resistant **Gilliner 1366W** and **Gilliner 1338W.**

M.C. Gill discusses his $250,000 endowment to the University of Southern California (USC) with Jack Hoagland, USC Director of Engineering Development. The endowment established a professional chair.

Pacific Southwest Airlines used Gillfloor 5007A to construct galleys in many of their Boeing 727's.

This Fairchild-Swearingen Metro II used aluminum-clad balsa Gilfab 5040 for flooring and bulkheads, and Gilliner 1066 in the cargo compartment.

MILESTONES AND INNOVATIONS

- Developed Gilfab 1102 (phenolic cargo liner) for Douglas.
- Ballistic laminates sold to and used on U.S. Navy's prototype frigate.
- Gillfloor 5007C introduced.
- First endowment to University of Southern California (USC) for study of composites as structural materials.
- Gilliner **1166 and 1266** developed for the Boeing 737.
- Gilliner **1338** adopted as original equipment for the Lockheed L-1011.

Putting finishing touches on a **Gillfloor 5007C** installation at Western Airlines.

The Rohr Corporation asked M.C. Gill to fabricate the overhead luggage racks in the Turboliner they manufactured for AMTRAK.

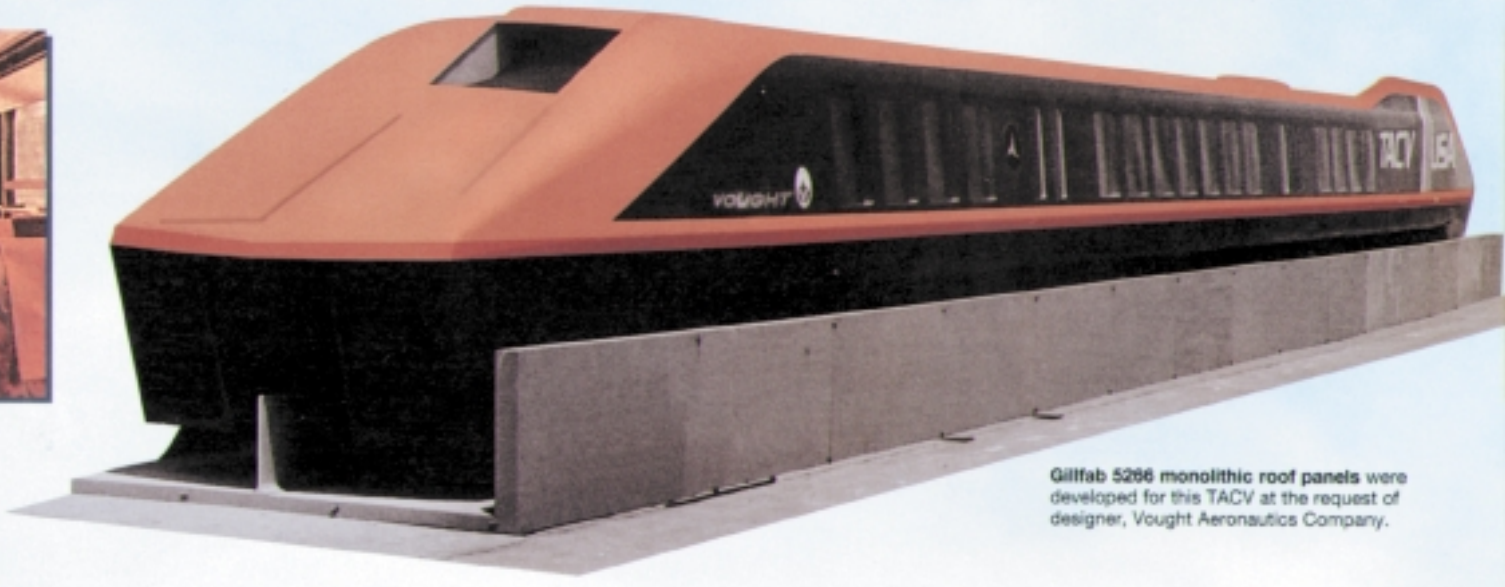
Beverage cart is constructed, in part, from M.C. Gill sandwich panels.

M.C. Gill ballistic laminates help protect electronic equipment aboard U.S. Navy frigate.

5007A was used as the primary material in bulkheads of this racing yacht.

Note Gilliner 1066 in cargo compartment where after complete installation it also protects wiring and cables.

The face shield for the welding helmet, shown here with lens attached, was developed for 3M and greatly improved with Gillaminate 1036.



Gillfab 5266 monolithic roof panels were developed for this TACV at the request of designer, Vought Aeronautics Company.

50 Years of Progress 1980 to 1990

Building 5, Easy Street, El Monte, California. 31,220 sq. ft. (133,680 sq. ft. total).

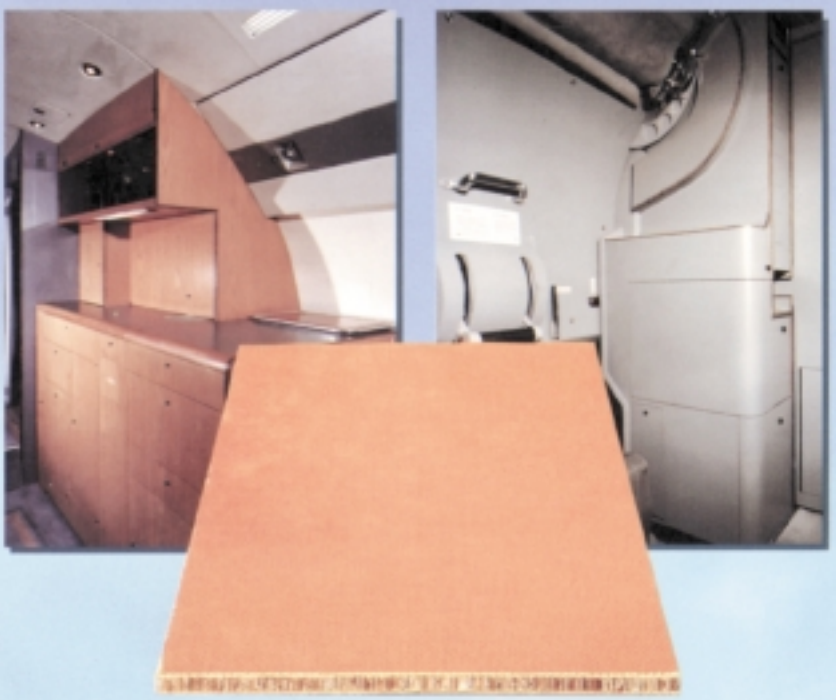
Technicians testing resin formulations in Building 5's new R & D lab.

Quality Control technicians conducting an impact test on Gilliner (left) and climbing drum peel on Gilfloor.

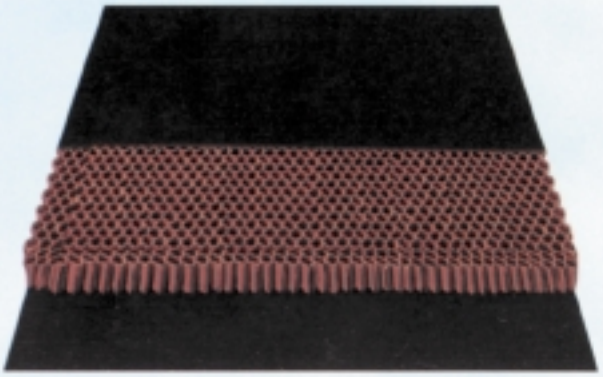
MILESTONES AND INNOVATIONS

- FAA's stance on stricter fire-resistance and low-smoke emission result in increased use of phenolic resin based products.
- Gilfab 1167 becomes first phenolic cargo liner qualified at McDonnell Douglas.
- Gilfab 1367 becomes first phenolic cargo liner used extensively in Boeing aircraft.
- In-house Nomex and aluminum honeycomb production began.
- Royal Plastic Manufacturing Company acquired.
- Space-Flex Company acquired (since merged with our Royal Plastic Division).

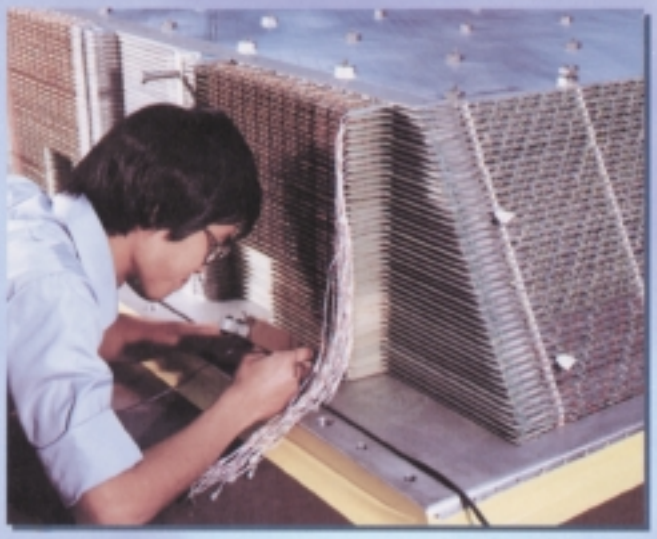
The Falcon 90 uses Gilfab 5055 for the interior cabinetry shown below.



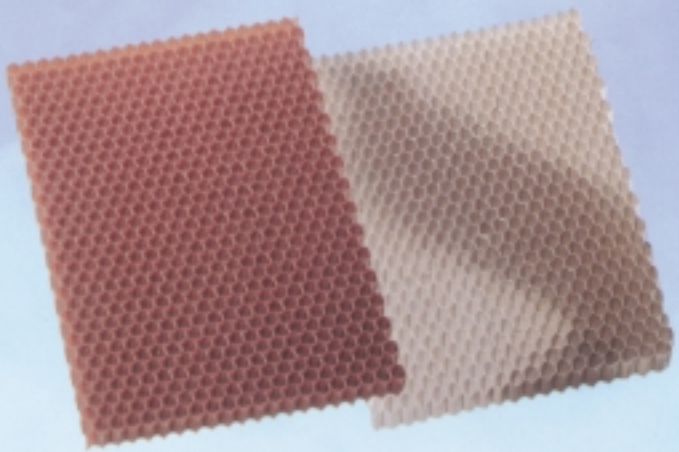
Carbon faced Nomex® core Gilfab 4109 is used as original and replacement flooring in British Aerospace's BAe 146 passenger compartment.



The contoured ducting (shown below), fabricated by our Space-Flex division, circulated purified air to cool launch vehicle batteries, before and after launch, of Rockwell's Navstar satellite (right).



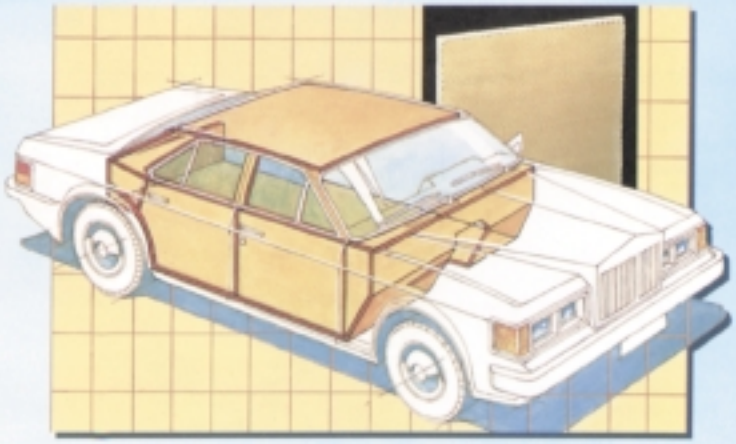
As part of a research study of sub atomic particles, including the Quark, Lawrence Livermore Laboratory sought M. C. Gill's assistance in designing and manufacturing 72"x149" flat panels with pure lead cores, fiberglass interlay and aluminum foil facings. Here a technician wires electrical connections to the panels.



Continuing its policy of vertical integration, M.C. Gill manufactures aramid fiber and aluminum honeycomb cores, both for its own sandwich panel cores and as stand alone sales to customers.

A sampling of contoured parts made by M.C. Gill division, Royal Plastic.

Yakima Products' Spacecase, a car-top mounted storage unit fabricated by Space-Flex Division.



Gillfab 1050, a Kevlar® constructed ballistic laminate (illustrated in yellow) used as armor protection in an automobile.

50 Years of Progress 1990 to 1995

Building 6, Easy Street, El Monte, California. 35,841 sq. ft. (169,521 sq. ft. total).

New larger Royal facility in Minden, Nebraska adds 24,590 sq. ft. plus 17,600 sq. ft. of offsite warehousing for a total of 42,190 sq. ft., and an M. C. Gill Corp. grand total of 211,711 sq. ft.

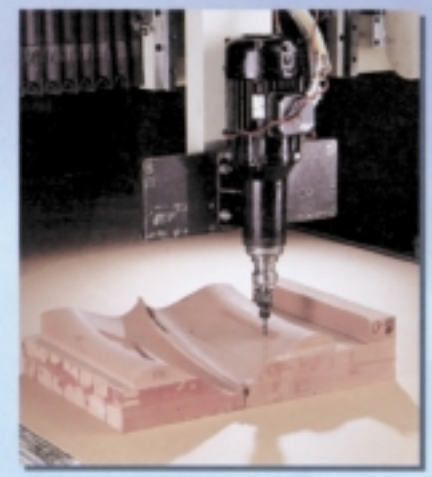
Computer Numerically Controlled (CNC) profiler, shown here detailing Gillfab 4109 flooring panels for the MD-80 and MD-90.

MILESTONES AND INNOVATIONS

- First cargo liner manufacturer to qualify the same product, Gillfab 1367A at both Boeing and McDonnell Douglas.
- Multi-year cargo liner contracts with Boeing.
- Gillfab 4109 flooring qualified for MD-11.
- Multi-year honeycomb contracts with Boeing.
- First flooring panel manufacturer to qualify for replacement flooring on all Airbus aircraft.
- Gillfab 1367 qualified at Lockheed.
- Quality control system formally approved by Boeing.
- M.C. Gill Chair of Composite Materials at USC occupied.

McDonnell Douglas' MD-11 has M.C. Gill cargo liner, and passenger and cargo compartments flooring as original equipment.

One of the periodic checks on in-service wear — in this case, Gillfloor 5007C in a FedEx 747 freighter.



The CNC machine profiling a pattern used to make molds for contoured parts.

In response to customer requests, overexpanded Gillcore is now available. It facilitates curving or forming the honeycomb into simple contours in the "W" (warp or width) direction.

In addition to flat sheets and blocks, these are just a few of the many shapes to which **Gillfoam®**, the new low-smoke, fire resistant foam, can be molded.

A major European airline requested of Airbus that a U.S. manufacturer be qualified for Airbus replacement panels. The result was that Gilfab 4105, 4205, 4322, and 4323 are the only replacement flooring panels qualified for all Airbus aircraft–the A300, A310, A320, and A321.

The oil burner burn-through test subjects cargo liner to a 1700˚F flame for five minutes.

All-composite cabinetry, developed by our Royal Plastic Division. Royal's construction will save up to 50 percent in weight over conventional materials with no loss of strength.

RECOGNITION FROM VALUED CUSTOMERS SUPPORTS OUR MOTTO "WE TRY HARD ENOUGH TO MAKE IT HAPPEN"

1994 AWARD *for Preferred Supplier Certification. Presented by McDonnell Douglas.*

1993 AWARD *for meeting an emergency need. Presented by General Dynamics.*

1993 AWARD *for The Small Business Supplier of the Year. Presented by Boeing Airplane Company.*

1992 AWARD *for The Small Business Supplier of the Year. Presented by Boeing Airplane Company.*

1992 AWARD *(not pictured) for Small Business Administration Award for Excellence. Presented to Royal Plastic by U.S. Department of Defense Contract Management.*

1991 AWARD *for* continually producing quality products on time. Presented to Royal Plastic by Warner Robbins Air Logistics Center.

1986 AWARD *for outstanding performance by a sub-contractor. Presented to Royal Plastic by McDonnell Douglas.*

50 YEARS... AND THE BEST IS YET TO COME

by M.C. Gill

Editors Note: One of M.C. Gill's strongest attributes has been his forward vision for the Corporation. In the following editorial, he takes a look back at his first fifty years in the composites business. In the fall issue of the Doorway, he will don his soothsayer's hat and look into his crystal ball to see what the future holds.

From time to time, I step outside of myself and take an honest objective look at the M.C. Gill Corporation and try to evaluate "What" and "Who" we *really* are. The timing seems right to do that and review how far we've come in the last half century.

Thinking back, the M.C. Gill Corporation was conceived to establish a new type business whereby one produces laminates never before available... made from materials heretofore known only to a few. Realistically, the only qualifications to indulge in such a business venture was an irrepressible faith in the product, a pioneering spirit, and a conviction that where one is going is better than where he's been.

INNOVATIONS FOR COMMERCIAL AIRCRAFT

Basically, we are a processor of reinforced plastics (thermoset organic resin composites) which we laminate in many configurations for various end uses. We are experienced and knowledgeable in our somewhat narrow field—as good as any and better than most. After 50 years, our principle market is commercial aviation interiors and, like the industry as a whole, we are heavily dependent on the public demand for air travel. As a pioneer our experience gives us an opportunity to develop and supply innovative materials that improve the performance and operating economy of commercial aircraft. We do that very well—it's a labor of love.

The best is yet to come" has *always* been the case. It is especially true of those who look ahead... the future always looks brighter than the present and certainly better than the past. That dangling carrot has kept *us* hustling these past 50 years.

MARKETS ALL OVER THE WORLD

It has taken a long time for it to happen, but the markets for those same resins and glass cloth composites I struggled to find in the mid-forties have now been "discovered." They are spread all over the world, with end uses far removed from what I or anyone could have envisioned when I hung out the Peerless Plastic Products shingle in early September 1945.

We are not very large in terms of dollar sales volume. We are a solid company with world class customers and a world class manufacturing capability to complement them. It has been said that we are regarded as a company that our customers enjoy doing business with, and one that is genuinely concerned and anxious to help.

50 YEARS... AND THE BEST IS YET TO COME

Continued

GROWTH CALLS FOR MORE SPECIALISTS

Some see us as eager innovators who are dedicated to encourage the healthy growth of composite materials. Our sole sponsorship of an endowment for a Chair in Composites Engineering at the University of Southern California supports that impression. College students should at least be acquainted with the basic principles of reinforced plastics, and hopefully those that pursue this field will be recognized as specialists on the same level as, say, metallurgists. I believe that just as strongly today as I did in 1977 when I made the initial endowment for the Chair.

Furthering that impression is our company's quarterly publication, The Doorway. It is a first class publication in which we attempt to educate and tell it straight regarding the pros and cons of various composite products. It's gratifying when we learn of back issues being saved for future reference by many engineers. In fact, I must admit that I puff up quite a bit when I hear I've been quoted. The publication truly reflects the heart and soul of the M.C. Gill Corporation, and we're proud of it.

WE ALL TAKE PRIDE IN WHAT WE PRODUCE

Our employees *are* the company. By and large they are the best we have ever had! After 50 years we have much to congratulate ourselves for in assembling the crew we have today. The "best" has been slow coming but no one has more dedicated employees—our people are second to none.

In addition to our employees, an integral part of our team has been dependable, concerned suppliers who early on gave us credit when it wasn't warranted. I believe it is perceived that we extend to them the same loyalty and consideration we often enjoy from many of our customers. We have quite a number of such suppliers. They make us stronger and able to fulfill our ideals. Their sales representatives are knowledgeable, valued and respected. After all, we're in this together.

COMPOSITES...OUR FULL-TIME JOB

Thinking back to our many innovative contributions to the L1011 (Gilliner 1438 and Gillfloor 5133 are just two that come to mind) convinces me that by working closely with our customers and their engineers we can make such an association very rewarding for all concerned. Composites are our full-time job and entire life, while with most everyone else working with them, it is really only on a part-time basis. It is difficult to keep pace with this still young and fast growing material unless one is working with it day in and day out on a full-time basis.

On occasion, I indulge myself in speculation as to whether I should have taken more business courses in college. They might have taught me what I had to learn the hard way. Had I paid attention and practiced what was taught, I might never have started this business on a shoestring in the first place. Moreover, it would be reasonable to assume that I would now be retired, fat and happy, living off a big fat pension on some tropical isle. Instead, I'm still trying to convince people to "Go Gill"... so they too could "take it easy." Nonetheless, I have no deep regrets. And besides, look at the fun I'd have missed.

TRYING... TRYING... TRYING...

It has always been comforting and I am grateful that over the years no one has limited how hard we could try or what hours we could work. This has given us an edge. I would say the phrase which perhaps best epitomizes the spirit of the M.C. Gill Corporation is "We try hard enough to make it happen." In total, we have not lost our pioneering spirit, nor the conviction that where we are going is better than where we've been. The bottom line has been that pleasing the customer comes first and profits second; but, we work hard enough to achieve both.

So much for introspection. Let's get started on the next 50 years...The Best is Yet to Come.

NEWS FLASH

Gilliner 1076B, a fiberglass reinforced polyester laminate used for cargo liner in Boeing aircraft, has met or exceeded all mechanical and physical property values of and is now qualified to Boeing's BMS 8-2, Class 3, Type 20 and Type 46. 1076B was developed specifically to address the durability requirements in the 737's forward cargo compartment (lower sidewall sections).

THE FUNNY SIDE

As the man sat down in the movie theater he was amazed to find he was sitting behind a woman and a golden retriever. Moreover, the dog laughed at just the right times throughout the movie—a comedy. After it was over, he said to the woman, "I'm astounded that your dog enjoyed the picture so much." "So was I," she replied. "He didn't like the book at all."

★★★★

After a terrible argument, the husband and wife had driven for miles without saying a word. As they were passing a pasture the husband pointed to a mule and said, "Relative of yours?" "Yes," retorted his wife. "By marriage."

★★★★

Breaking an amorous hug, the woman got off the couch to answer the phone. "Who was it?" asked her companion. "My husband," she replied. "Uh oh, I'd better get out of here," he said. "Relax. He's downtown playing poker with you."

★★★★

After a lousy day on the course, the frustrated golfer turned to his caddy and said, "You've got to be the worst caddy in the world." "I don't think so," the caddy replied. "It would be too much of a coincidence."

★★★★

Forty years ago, people paid 25 cents to see a movie. Today they pay hundreds of dollars for a big screen TV... and watch the same movie.

★★★★

Anyone who thinks there's room at the top has a lot to learn about pyramids.

★★★★

Not only is woman's work never done, the definition keeps changing.

★★★★

Pride: What you feel when your kids net $150 at a garage sale.

Panic: What you feel when you realize your car is missing.

★★★★

What is considered a living wage depends on whether you're receiving it or paying it.

Trivia

Casey Stengal hit Yankee Stadium's first two World Series home runs.

★★★★

No President of the United States has been an only child.

★★★★

The most productive meeting lasts less than an hour. The average meeting lasts less than two hours.

★★★★

In 1940, America's public school teachers identified some of the top problems in public schools: talking out of turn, chewing gum, making noise, running in halls, and cutting in line.

★★★★

Oklahoma City was founded on April 22, 1889, during the Great Land Run. The population went from 0 to 10,000 in 24 hours.

★★★★

The odds are 1 in 400 that a Swiss army knife produced this year will be bought by the Swiss Army.

★★★★

Since 1980, New York City has had 16 earthquakes measuring between 3 and 5 on the Richter scale.

★★★★

Since 1991, Governor Wilson has declared a state of emergency in California 30 times.

★★★★

Six percent of all U.S. corporation sponsorship has gone to the arts; 65 percent has gone to sports.

★★★★

When Richard Halliburton swam the length of the Panama Canal in 1928, he paid a toll of 36 cents. He weighed 140 pounds and was charged as though he were a vessel, in terms of tonnage.

★★★★

In an edict issued in 1592, Pope Clement VIII officially recognized coffee as a Christian drink.

★★★★

A National Basketball Association basketball will last approximately 10,000 bounces.

★★★★

In 1931, Lili de Alvarez became the first woman to wear shorts in a tennis match at Wimbledon.