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Biz Jets Take Off With M.C. Gill



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Dreams of the “good life” evoke a collection of images: the chauffer-driven Rolls, a gleaming yacht, the beachfront mansion, head-turning jewelry, designer clothing and, of course, the private jet. Conventional wisdom says the trappings of the rich and famous are limited to those privileged few at the top of the economic ladder. Fortunately, material advances, new technologies, atypical selling strategies and a shift in perspective have propelled private jets into the mainstream mindset.



Prior to 1964, few individuals traveled by air. Those who did relied on commercial carriers and their scheduled routes. Smaller planes were largely flown for pleasure, and the concept of private ownership for professional transport was rare. This was largely due to the excessive cost associated with maintenance and use and served as a major limiting factor to market growth.

Private or “business” jets first appeared on the public radar in the 1960s. A handful of prominent aviation veterans were first to venture into the air taxi business with a series of piston-engined and small turbo-prop aircraft. Relying on military principles in utilization and management, the group launched the Executive Jet Company. Their subsidiary, NetJets, would offer private individuals and corporate entities the benefits of “destination on-demand” flight.

NetJets executive Richard Santulli devised a plan to reduce the fiscal impact of single ownership by sharing access and expenses between several parties. This unique concept called “Fractional

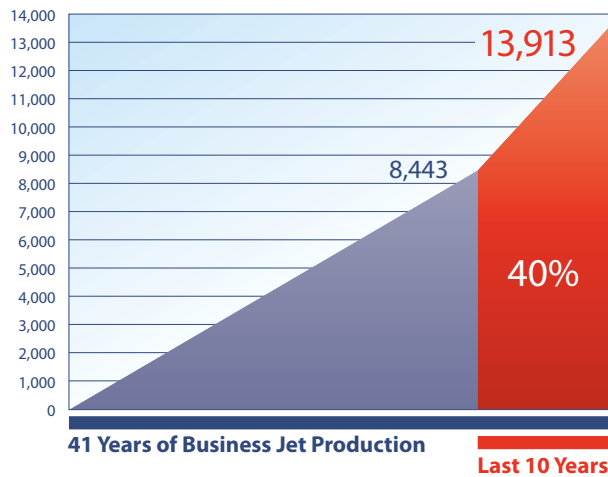
Ownership” had a radical effect on the private jet market. Businessman Warren Buffet realized the genius behind this thinking and purchased NetJets in 1998.

Several firms service this niche today. “It is predicted that Fractional Jet Ownership and leasing will be the dominant form of ownership of business jets by companies or individuals.”¹ Until recently, business jets have been the stepchild of the commercial airline industry. However, this market segment is clearly poised to “take a seat at the grown-ups table” and will have a direct impact on the future of the aerospace industry.



¹ Fractional Jet Ownership, Craig Williams, www.fractionaljetownership.com

The business jet market (like commercial aviation) has rebounded since a slump in the late 1990s. "Of the world total of 13,913 business jets delivered during the market's 41-year history, about 40%, or 5,470 planes, were delivered in the past 10 years."² A look at the companies involved, and their product offerings, explains this evolution.



Business jets fall into five classes: large, super mid-size, mid-size, light and very light. Key players in the business jet market include Boeing, Airbus, Gulfstream, Bombardier, Cessna, Dassault Falcon and Hawker Beech. Marketing strategies and models vary by manufacturer but one thing is clear: quality is king. Private jets are a sizeable expense so the manufacturers are painstaking in their supplier selection process. Exceeding expectations is nothing new to M.C. Gill Corporation. We provide products that are found on countless business jets manufactured today. Some are sold directly to the manufacturer but many more are sold to tier-one suppliers who support the growth of this market segment.

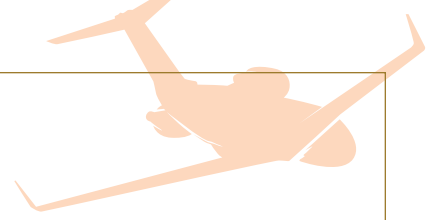
Ten years ago, Boeing realized the potential of this market segment and created Boeing Business Jets. BBJ focuses on heads-of-state, corporate leaders and charter companies that are looking for a long-range aircraft with significantly more interior space than conventional business jets. The Boeing website explains, "Our customer base comprises people who put a high premium on mobility, for both their airplane and themselves. They don't want to be immobilized when they travel, but prefer to live as they do on the ground, with access to an office, bedroom, shower, dining facilities, entertainment areas and more."³



Confirmed orders trigger Boeing Commercial to ship BBJ aircraft in "green" condition (no paint or interiors). Long-range fuel systems are then installed before the plane goes to one of five completion centers. The plane is then outfitted, from floor panels to interiors, before it reaches the customer.

² Business Jet Free-Fall Ends, Richard Aboulafia, Teal Group, Aerospace America, May 2005
³ www.Boeing.com/commercial/bbj





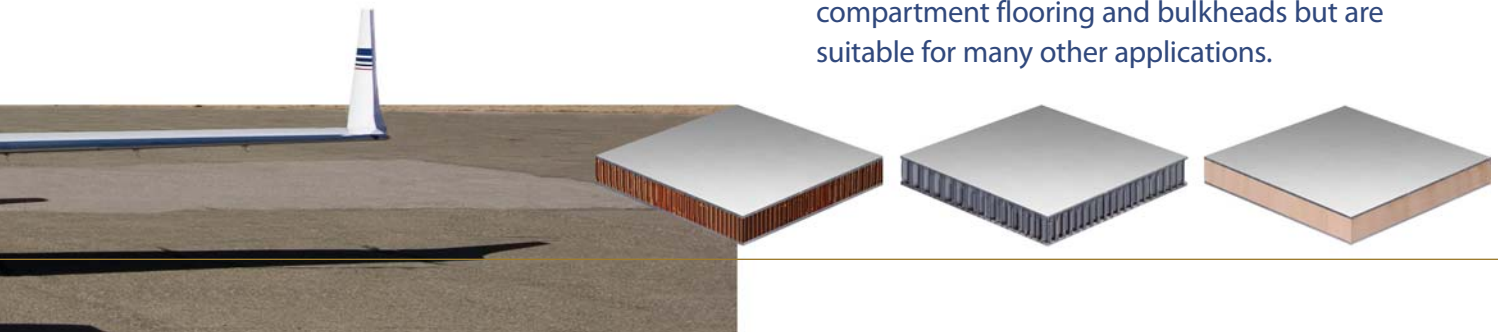
M.C. Gill Corporation supplies several materials used in this process including Gillfloor 5424 (qualified to BMS-4-23) and Gillfloor 4417 (qualified to BMS-4-17). Gillfloor 5424 is an aircraft grade sandwich panel made from high-impact fiberglass epoxy facings bonded to aluminum honeycomb core. This product is ideal for passenger compartment floorings and offers high puncture resistance. Gillfloor 4417 is a lightweight material made from unidirectional fiberglass-reinforced epoxy facings bonded to aramid honeycomb core. Gillfab 4417 is suitable for the passenger compartment areas, aisles, entries, galleys and some cargo compartments.

Europe's premier aircraft manufacturer is Airbus. Their competing aircraft (in the large classification) is the A319CJ. This aircraft is a long-range aircraft designed for minimum change development to speed conversion in the event of resale. Airbus is well known for its progressive use of composites. Alcore Brigantine contributes to its success by supplying machined honeycomb for the nacelles and slats.

Bombardier entered the fractional business jet market in the mid 1990s. Their newest large-class business jets are the Global Express XRS and Global 5000. These aircraft offer ultra-long-range capabilities with the ultimate in comfort and performance.

Reducing weight is an obvious means to increase range capabilities, so Gillfab 4030 is a preferred material for the interior structures. Gillfab 4030 is used in bulkheads, shelving and galley panels. This product is a semi-structural sandwich panel composed of aluminum skins bonded to an aluminum honeycomb core. Bombardier completes their offering with mid-size and light class Learjets that seat fewer passengers (4-8) but offer high-speed cruise, improved payload and range without compromising cabin comfort.

M.C. Gill Corporation crushed-aluminum core sandwich panels were utilized in early Learjets. The newer Learjets now integrate products like Gillfab 5040 in their interiors. Gillfab 5040 is an aircraft-grade sandwich panel made from aluminum alloy facings bonded to end grain balsa wood core. These panels are generally used in cargo compartment flooring and bulkheads but are suitable for many other applications.





Interestingly, the success of these aircraft has created a unique economic opportunity. Smaller local suppliers are picking up unexpected “off-load” work from Bombardier. This unique benefit strengthens the local economy and the aerospace industry as a whole. It also emphasizes the importance of the relationship between suppliers and manufacturers.

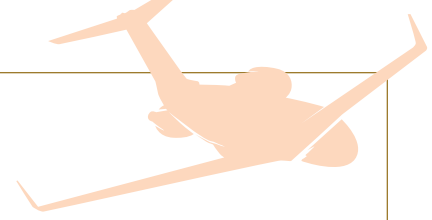
M.C. Gill Corporation and Israel Aerospace Industries (IAI) are an example of a well-coordinated supplier/customer relationship. “Israel Aerospace Industries is globally recognized as a leader in developing military and commercial aerospace technology. Development and production of state-of-the-art

business-jet aircraft has been a prominent activity for more than three decades.”⁴ The relationship between M.C. Gill Corporation and IAI goes back over 15 years. During that time, the opportunity to venture into the business jet market emerged. IAI builds the jets and ships them in green condition to Gulfstream. Gulfstream finishes the aircraft (per customer specification) prior to delivery.



IAI recognizes M.C. Gill with Quality Award. Picture L to R: Josef Dror, Director of Procurement & Logistics; Zvi Genisher, General Manager Jet Program; Candi Burdick, Sales Manager M.C Gill Corporation.

The Gulfstream G200 is a newer model incorporating M.C. Gill products. This aircraft is part of an aggressive weight-reduction program, so material properties must align with that directive. Gillfloor 4709 is manufactured at the M.C. Gill plant in El Monte, California. It is a lightweight floor panel made from unidirectional carbon fiber-reinforced epoxy facings bonded to Nomex® honeycomb core. This product is ideal for cabin compartment flooring and the lightweight property is a key



Another successful relationship exists between M.C. Gill and Dassault Falcon. Production model aircraft are manufactured in France then shipped “green” to the main completion center in Little Rock, Arkansas. Build rates have increased by more than 10% per year, so Dassault Falcon recently expanded the complex to accommodate demand. The Little Rock facility is responsible for creating executive interiors that delight their customers and M.C. Gill supplies a number of products to ensure that happens.

Gillfab 4030 is used for bulkheads, shelving and galley panels. This product is a semi-structural sandwich panel composed of aluminum skins bonded to an aluminum honeycomb core. These panels can be customized by skin thickness, alloy, honeycomb density and panel thickness. Gillfab 4034 is a high-performance sandwich panel with epoxy resin pre-impregnated carbon facings and aluminum core. This panel is designed for areas where strength plus weight reduction is required. Gillfab 4034 is used in cabinets (as bulkheads, dividers and shelves) and for cabin dividers and doors. Superior stiffness to weight ratio translates into a product that is lightweight yet rigid enough to convey a feeling of quality. Gillfab 5020 is a thin sandwich panel made from 2024-T3 alloy aluminum bonded to crushed aluminum honeycomb core. Gillfab 5020 displays the rigidity found in sheet aluminum at half the weight. It can be formed and used to replace aluminum sheeting in electrical housings, low-traffic flooring, bulkheads, shelving, equipment cases, access doors, covers and external parts. Gillfab 5120 is a thin sandwich panel made with aluminum skins and aluminum honeycomb that is ideal for flooring, cabinetry and instrument panels. It is more rigid than plate aluminum at half the weight. Gillfab 5020 and Gillfab 5120 each withstand excessive loads and perform in areas that require extra strength and stiffness.

feature. The panels are shipped to our European subsidiary in Northern Ireland, M.C. Gill Europe, where they are detailed to IAI specs. The “kitted” panels ship to IAI where they are installed.

Substantially more aggressive weight savings were required on the Gulfstream G150. M.C. Gill panels fill the aircraft in the cabin flooring and baggage compartments (bulkheads, side walls and ceiling panels). M.C. Gill’s vertical integration led to an iteration of Gillfab 4709, resulting in a unique new product. Raw panels are shipped from California to M.C. Gill Europe (for fabrication) before they reach the completion center.

The success of the IAI Gulfstream business jet program is a tribute to the quality and reliability of their suppliers. In recognition, IAI awarded M.C. Gill with a Supplier Excellence & Performance Award in November, 2006.

In fact, M.C. Gill products consistently exceed requirements and help Dassault Falcon grow their market share. That's good for the industry and especially good for Little Rock. Dassault Falcon is a major employer in the area and the business climate predicts that will continue. Dassault Falcon consistently releases exciting new advances (like Fly-by-Wire technology in the new 7X) and they have positioned themselves as a key player in the business jet market.

Northeast of Arkansas lies the "air capital" city of Wichita Kansas. Wichita is home to Hawker Beechcraft, a preeminent manufacturer of business jet aircraft. Hawker Beechcraft has been a presence in the business jet market since the 1970s. Hawker Beechcraft designs, markets and supports their products and services for businesses, governments and individuals worldwide. Their products include super mid-sized, mid-sized, light, turboprop and single-engine piston aircraft. Hawker Beechcraft employs over 6,000 employees in the Wichita area. It is one of several aerospace industry employers that account for up to 10.2% of all jobs and 16.1% of payroll in Kansas.⁵


These numbers attest to the impact this market segment has on the region. Fractional ownership programs have certainly helped to fuel the growth of business jets as these aircraft have become more accessible.

M.C. Gill products are a staple to Hawker Beechcraft aircraft interiors. Peel away the rich mahogany veneers and you'll find composite materials. Gillfab 4030 is a semi-structural sandwich panel composed of aluminum skins bonded to an aluminum honeycomb core. This product is used in bulkheads, shelving and galley panels that are customized to achieve a premier cabin environment. The material properties meet safety requirements plus provide durability and weight savings. Gillfab 1367A and 1367B are fiberglass-reinforced phenolic laminates with superior puncture/corrosion resistance. Both are used as aircraft cargo compartment liners and feature a Tedlar® overlay on the face side for surface reflectivity and resistance to cleaning solutions. Per specification, M.C. Gill customizes these laminates with a granite color to mimic commercial aircraft before shipping directly to the manufacturer. This combination is popular with another highly successful aviation manufacturer, Cessna.

The Cessna name is synonymous with private aircraft. Their biography reports "over the past 70 years, we've built more airplanes than anyone else on the planet."⁶ Cessna claims to have the world's largest family of business jets (The Citation) and incorporates Gillfab 1367A and B into their aircraft. These days, Cessna is committed to a new venture that has the industry buzzing: very light jets.

Very light jets are also known as micro jets, ultra-light jets, personal jets or VLJs. These aircraft sell for approximately half the price of existing business jets. They have maximum takeoff weights below 10,000 pounds, operate on shorter (3,000 feet) runways yet can accommodate up to 4 passengers.⁷ Cessna and Eclipse Aviation have received Federal Aviation Administration certification for this class aircraft with combined orders exceeding 750 aircraft. Not surprisingly, there is a flood of companies waiting for FAA certification as well.





The FAA predicts the use of private business jets will triple over the next decade, driven by the introduction of relatively inexpensive “micro jets.”

The FAA predicts the use of private business jets will triple over the next decade, driven by the introduction of relatively inexpensive “micro jets.” According to Teal Group Aviation Analyst, Richard Aboulafia, “They’re the greatest growth market the aviation industry has seen in a long time.”⁸

It is clear the business jet market segment is rich with opportunity. While the aviation manufacturers are exploring these prospects, M.C. Gill is introducing some exciting new products and processes to address noise, weight, damage tolerance and other critical issues. We will share more about these innovative new products in future *Doorway* articles and on our corporate website www.mcgillcorp.com.

5 Kansas Aerospace Industry Forecast, Stan Ahlerich; Kansas, Inc., May 2006

6 www.cessna.com

7 Future Trends in Aviation, Airport Community Advisory Team, January 2006

8 Very Light Jets Poised For Aviation Stardom, Richard Aboulafia, MSNBC; Business Travel News



M.C. Gill Honors the Memory of John Frederick Kookan

Mr. Kookan joined M.C. Gill's Advisory Board in 2004 and served with distinction until his death.

John Frederick Kookan ended his courageous battle with cancer on May 1, 2007 at age 75. Born in Denver, Colorado, November 1, 1931, John graduated from Stanford University with an MS in Petroleum Engineering in 1954. Following service as an officer in the the US Navy, he returned to Stanford, earning a PhD in Finance in 1960. He began his distinguished business career when he joined Security First National Bank in 1960. He retired as Vice Chairman and Chief Financial Officer of Security Pacific Corporation, the parent of Security Pacific National Bank, following the orchestration of the successful merger with Bank of America in 1992. After retirement, John's outstanding reputation for sound judgment and depth of wisdom in banking circles lead first to his service on the Board of Directors of Golden State Bancorp. In 2002, John joined the Board of East West Bank, culminating his long and successful banking career which

spanned nearly five decades. In addition, John was deeply committed to community service. His involvement with the Children's Bureau spanned more than 30 years. He was a member of the Board of Directors since 1974 and served as President from 1982-1984. After becoming a founding member of the Children's Bureau Foundation, John served as President from 1994-1996. Because of his dedicated service, in 1998 John was awarded the Humanitarian Award, Children's Bureau's highest honor, honoring his gifts of leadership and integrity and his extraordinary commitment to the children and families of Los Angeles. For over 21 years, John served as a dedicated member of Pasadena's Huntington Hospital, and was elected as a lifetime Trustee. He served as Chairman of the Board from 1999 through 2002. John's commitment to share his financial acumen and expertise will be forever remembered. He will be greatly missed and remembered for his legacy of service to our community. First and foremost, John was a family man at heart and shared with them an avid love of world travel.

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Trivia

THE FUNNY SIDE

Take this test mentally, don't write down your answers, and don't shout them out.

1. Pick a number from 2 to 9. It can be 2 or it can be 9, or any number in between.
2. Take that number that you've chosen, and multiply it by 9.
3. That should give you a two digit number. Take those two-digits and add them together.
4. Take the resulting number and subtract 5 from it.
5. Take that number and correspond it to the alphabet, numbering the letters. A =1, B=2, C=3, and so on...
6. Take your letter, and think of a country that begins with that letter.
7. Take the last letter in the name of that country, and think of an animal.
8. Now, take the last letter in the name of that animal, and think of a color.
9. But remember, that there are no orange kangaroos in Denmark.

Two old ladies have played bridge together for many years, and naturally they have gotten to know each other pretty well. One day, during a game of cards, one lady suddenly looks up at the other and says, "I realize we've known each other for many years, but for the life of me, I just can't bring it to mind... would you please tell me your name again, dear?" There is dead silence for a couple of minutes, and then the other lady responds, "How soon do you need to know?"

★ ★ ★

The teacher of the Earth Science class was lecturing on map reading. He spent the class explaining about latitude, longitude, degrees, and minutes. Towards the end of class, the teacher asked his students, "Suppose I asked you to meet me for lunch at 23 degrees, 4 minutes north latitude and 45 degrees, 15 minutes east longitude...." A student's voice broke the confused silence, and volunteered, "I guess you'd be eating alone, sir."

★ ★ ★

A man went to a pet shop and bought a talking parrot. He took the parrot home, and tried to teach the parrot how to say a few things, but instead the parrot just swore at him. After a few hours of trying to teach the bird finally the man said, "If you don't stop swearing I'm going to put you in the freezer as punishment." The parrot continued, so finally the man put the bird in the freezer. About an hour later the parrot asked the man to please open the door. As the man took the shivering bird out of the freezer it said, "I promise to never swear again. Just tell me what that turkey did!"

★ ★ ★

Q. What do you get when you cross a snowman with a vampire?

A. Frostbite.

Q. Why do seagulls fly over the sea?

A. Because if they flew over the bay they would be bagels!

Q. Why don't skeletons fight each other?

A. They don't have the guts.

Q. What did the ground say to the earthquake?

A. You crack me up!

Q. What washes up on very small beaches?

A. Microwaves!

