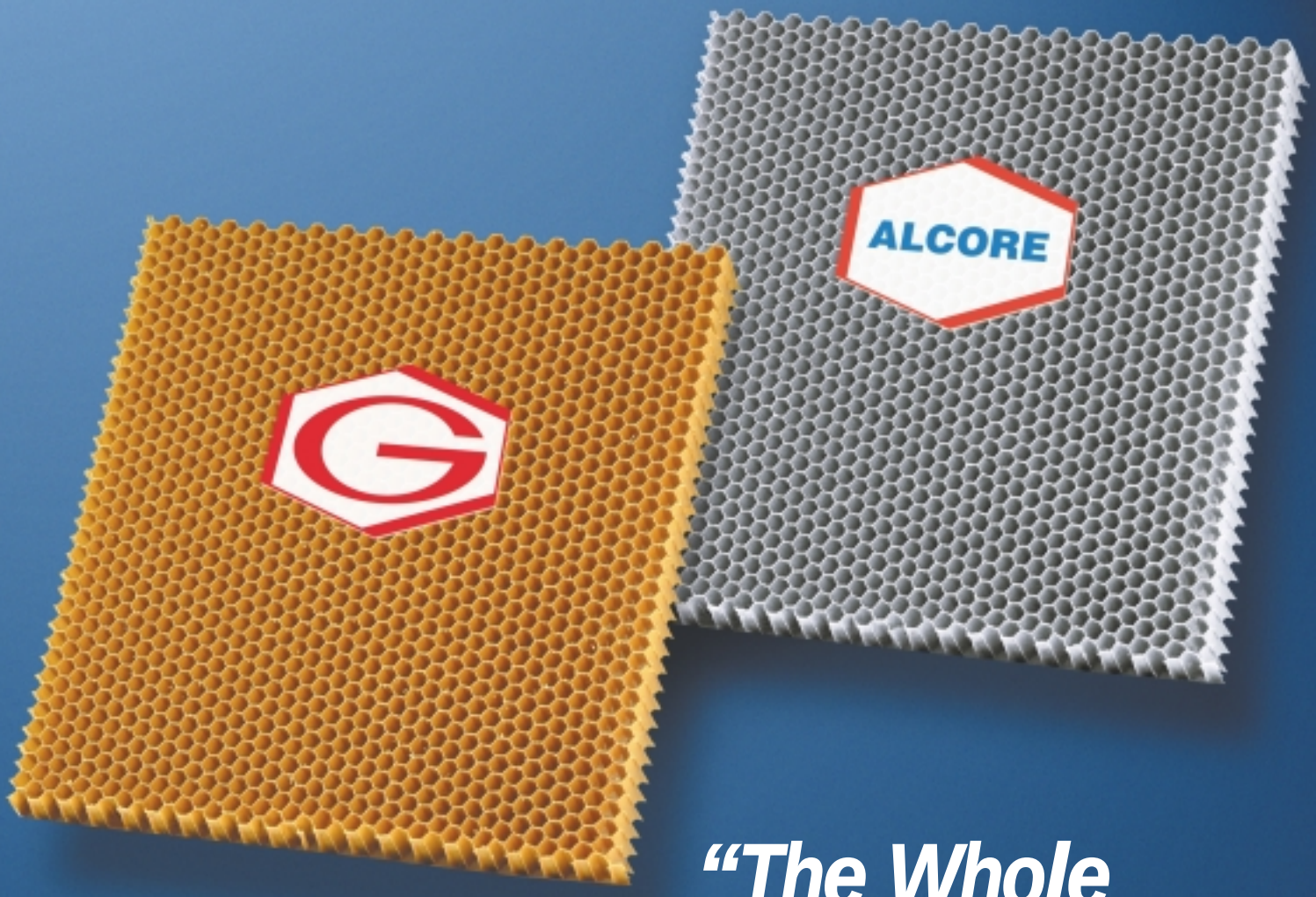
VOLUME 39
WINTER 2002
NUMBER 1

THE M.C. GILL DOORWAY™

HIGH-PERFORMANCE COMPOSITE PRODUCTS SINCE 1945



"The Whole Is Greater than the Sum of the Parts"

Alcore's 44 Years of Experience is Strengthened with M.C. Gill's 57 Years of Experience

Together we provide one reliable source for both Nomex® and Aluminum Honeycomb… Raw Stock, Machined or Bonded to Skin.

We promise these assurances:

- On-time Deliveries
- Unimpeachable Quality
- Fair & Competitive Pricing

High-Quality Structural Core to Fulfill Critical Requirements

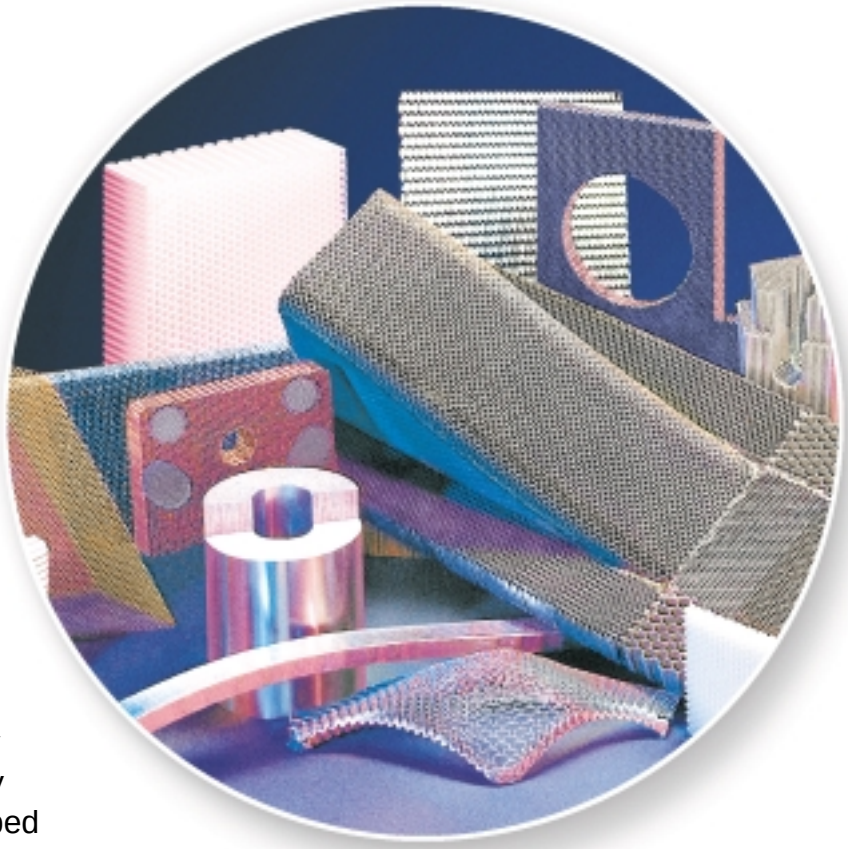
Alcore Corporation has long been a leader in providing high-quality, lightweight structural core materials to the aerospace, marine, construction, rail and other industries. With a wide variety of structural core materials, Alcore can draw upon its broad engineering expertise, along with sophisticated machining and processing to deliver solutions that are totally responsive to customer needs.

The origins of Alcore date back to 1958 when a forerunner company began manufacturing adhesives and honeycomb. Today the new Alcore is part of the M.C. Gill Group of Companies. This not only provides Alcore with ready access to a full line of Nomex® and Kevlar® honeycomb core products, but also strengthens its worldwide network of customers and agents.

Today Alcore employs a workforce of approximately 130 people, with operations combined in a single location near Baltimore, Maryland. Consolidation allowed for a comprehensive rethinking of the way production was routed through the manufacturing process, with a focus on lean manufacturing techniques to provide the most efficient work flow. This approach has reduced production times and improved quality.

Two Distinct Core Types

from a one-stop source



Gillcore® HD Nomex® Honeycomb

With its exceptional combination of a high strength-to-weight ratio, electrical and thermal insulation, and immunity to corrosion, Gillcore HD Nomex honeycomb is the ideal choice for a wide variety of applications.

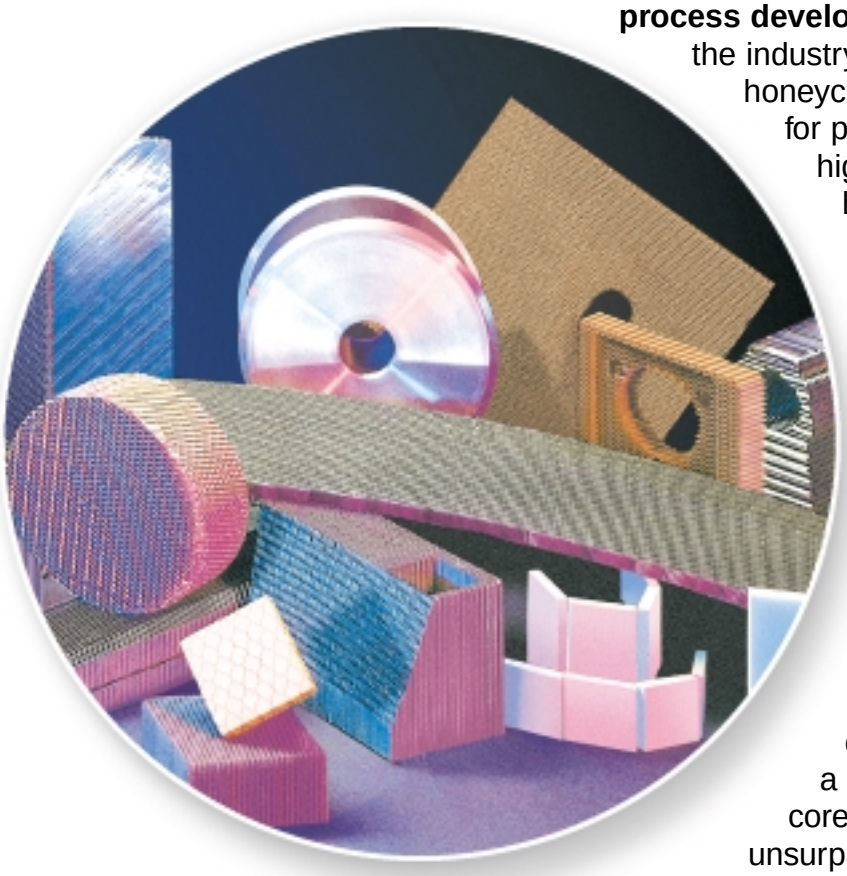
Gillcore HD is simple to fabricate, easy to handle and compatible with a variety of adhesive systems. This core is shipped directly from manufacturer, M.C. Gill, to Alcore's special processing center, where it can be machined, formed and bonded into custom-made core details that respond to specific needs.

100% CLE

Alcore provides all core materials, including special process parts, in a clean, bondable, drop-in condition. Customer operations, such as vapor degreasing which adds no value to a part and is environmentally unfriendly, are completely eliminated. This saves substantial time and money. The guidelines used to handle honeycomb core are detailed in Boeing's Form "B" specification and Alcore's specification SP-107A.

As part of the clean core policy, Alcore has positioned all its 5-axis milling machines in environmentally

PAA-CORE® Aluminum Honeycomb Core



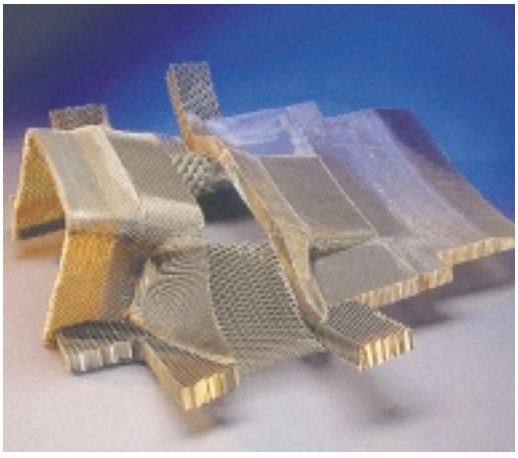
Using a phosphoric acid anodized metal treatment process developed by Boeing, Alcore introduced the industry to PAA-Core CORE aluminum honeycomb back in 1988. (PAA stands for phosphoric acid anodized.) This is highly corrosion resistant aluminum honeycomb core with excellent bonding capability and durability. It is an accepted replacement for non-metallic core with an outstanding record. One of its distinctions is a high strength-to-weight ratio. Over a decade of operational experience has shown that bond durability between core and skins is critical to long part life, and for this, PAA-CORE has no equal.

Independent analysis confirms the environmental performance durability of PAA-CORE, assuring a lower total life cost than with other core materials. PAA-CORE also has unsurpassed corrosion resistance, experiencing only minimal weight loss and virtually no loss of mechanical properties after extended exposure in an acidified salt spray chamber, which simulates the harshest environmental conditions.

AN CORE

controlled rooms, physically segregating metallic and non-metallic cores to prevent cross-contamination. These 5-axis rooms also ensure dimensional accuracy with a carefully controlled temperature environment.

Alcore also has two bond rooms, one for metallic and the other for non-metallic honeycomb that are entirely separate from one another. Different types of core can be spliced and stabilized in these areas, while uncured materials are kept in a clean room environment to protect them from contamination.



High-Efficiency Work Cells

The creation of three distinct work cells within the Alcore facility allows for focus on a particular set of skills and equipment required to work with different types of core materials. These work cells – the heart of Alcore's lean manufacturing environment – fall into three groups:

1. Aluminum Honeycomb Block and Panel Work Cell

This work cell is the heart of Alcore's business, where both commercial and aerospace grades of aluminum foil are treated and converted into expanded and corrugated honeycomb products. These materials can be supplied as complete blocks, cut on precision saws into slices or provided as expanded sheets, ready for immediate use in a customer's bond shop.

2. Special Process Metallic Work Cell

In this work cell, aluminum honeycomb is processed into bond-ready parts. Capabilities include CNC machining, chamfering, routing, slotting, roll forming, expanding, including specialty activities such as forming honeycomb over a drum for arc expanding.

3. Special Process Non-Metallic Work Cell

This area handles everything except roll forming and expanding. It was created to machine Nomex honeycomb into any configuration the customer requires. A CNC 5-axis mill is used to sculpt complex profiles. Some of the parts for Boeing 757 and 777 spoilers are manufactured in this work cell.

Responsive Engineering

Alcore is able to take anything, from basic design concepts to elaborate detailed drawings, and convert them into a final product. The results consistently exceed customer expectations. To accomplish this requires a depth of experience, thorough knowledge of fabrication techniques and the availability of resources that include state-of-the-art CAD systems.

Alcore and M.C. Gill engineers can provide meaningful input at the design phase to ensure that the final part is easily produced at the lowest possible cost. The Team's strength is the ability to determine the optimal method of machining, forming, bonding or otherwise adding value to any honeycomb product.

Alcore and M.C. Gill are also approved by all major aerospace companies to receive and handle CAD data in any format.

Experience in Nacelle

Alcore is known around the world for producing nacelle assemblies with both Nomex and aluminum honeycomb. Using Nomex core, they produce assemblies for GE Engines, including the CF6-80C2 and CF6-80E1. These are encasements around the gas turbine jet engine designed to aid in sound attenuation.

To fabricate this sound-dampening structure a wide range of expertise is required, including the capability for adhesive bonding and heat forming of core. CNC computer-controlled routers and 5-axis mills are used to precisely shape the material to exact specifications. The ability to shape and bond core of different types is critical to the creation of these nacelle assemblies. This combination of talents provides a capability that few companies possess.

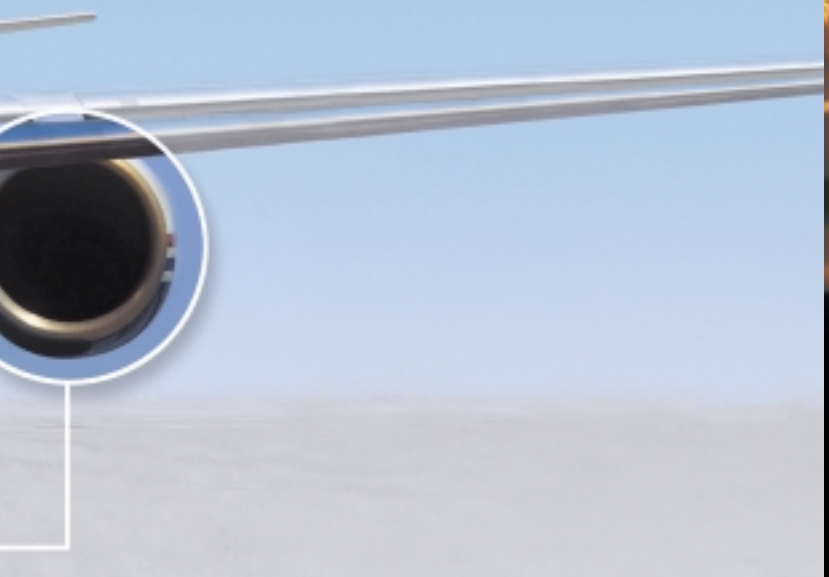
Honeycomb Technology

Nomex core is also used in nacelle assemblies for the Gulfstream G4 and other manufacturers' aircraft by Alcore.

For the C-17 military cargo plane, Alcore fabricates aluminum core nacelle assemblies. Aluminum was chosen for this, and other applications, based on environmental and load conditions specified by the design. The ability to perform the work needed to create complex aluminum structures requires another set of highly developed skills and clean room environments.

With demonstrated capabilities in both Nomex and aluminum core, customers say, "Alcore is the place we recommend people from around the world to go for nacelles."

Additionally, Alcore fabricates the innerwall engine flow surfaces on all Boeing 777 engines. They do this using proprietary Shapegrid® technology, which allows for precision shaping and bonding of parts. This type of fabrication is simply not possible using other production methods.



The M.C. Gill Group of Companies

M.C. Gill Corporation

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The M.C. Gill Corporation is the world's largest manufacturer of original equipment and replacement baggage compartment liners for passenger and freighter aircraft. We are one of the largest producers of composite sandwich panels used for aircraft flooring in these markets.

The company also excels in most other types of fiber-reinforced plastics including flat panel composites, bullet resistant ballistic laminates, interior panels for creating structures such as aircraft galleys and bulkheads, honeycomb core and related products.

Alcore

Manufactures a variety of metallic honeycomb cores for aerospace and other applications. Offers extensive special processing capabilities on metallic and non-metallic cores, from simple operations like chamfering to complex processes including roll-forming, 5-axis machining and splicing of different densities into core blankets.

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phone: 410 676-7100 fax: 410 676-7050
email: sales@alcore.com

Alcore Expedited Delivery
Alcore Overnight™ 410 676-7100 x283
email: overnight@alcore.com.

Alcore does not sell sandwich panels. Contact M.C. Gill for these products.

Castle

Specializes in aircraft quality metal parts fabrication, engineering and design. If a piece of metal can be bent, pressed, punched, routed, shaped, molded, welded, profiled or fabricated into a high performance part, Castle has the equipment and experience to do it

Castle Industries of California, Inc.
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Ontario, CA 91761-1502
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email: castle@cogent.net

Alcore Brigantine

Offers broad capabilities in structural core materials technology in Europe, including: Aluminum honeycomb, with special processing expertise and an in-house design office. Manufacture of sandwich panels from simple shapes to extremely complex parts. Advanced aluminum honeycomb shock absorption materials used as a kinetic energy absorber in everything from high-speed trains to automotive safety.

Brigantine propose une offre de compétences très large sur les technologies des matériaux d'âme structuraux en Europe. Fabrication de nid d'abeilles aluminium, expérience de l'usinage de précision de ce matériau, bureau d'études intégré. Fabrication de panneaux sandwich, des grandes séries aux pièces les plus complexes. Etude et fabrication d'absorbeurs de chocs en aluminium pour de nombreuses applications allant du ferroviaire à l'automobile.

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Insoleq – M.C. Gill Europe Ltd.

Manufactures aircraft insulation, details composite panels including various honeycombs and creates complex assemblies using advanced fabrication methods. It also provides warehousing for other M.C. Gill products for quick European delivery.

Insoleq
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Bangor Co-Down BT19 7TA, N. Ireland
phone: 02891 470073 fax: 02891 478247
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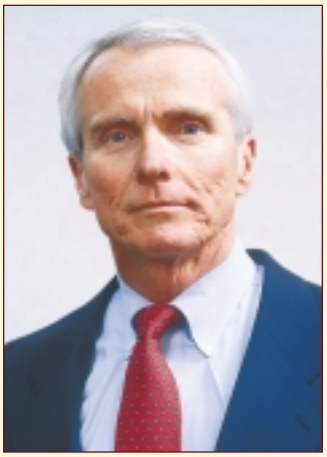
NEWS



Kenneth Boudreau Named CEO

Company founder M.C. Gill announced on January 16, 2002, that Kenneth Boudreau was promoted to the position of CEO of M.C. Gill Corporation. Ken is a CPA and has significant experience as a successful executive with a Los Angeles-area plastic products manufacturer. Coming to M.C. Gill Corporation in 1996, he first served as CFO before promotion to VP of Operations in 1998.

“I look forward to continuing the rich tradition of giving our customers what they want, how they want it and when they want it,” Boudreau said. “Right now the industry is feeling the effects of global events, which we will weather, just as M.C. Gill Corporation has stayed strong over the years by remaining flexible in all aspects of the business.”

Mr. M.C. Gill will continue to serve actively as Chairman of the Board, providing insight to guide the continued success and growth of the company.

Insoleq™ Floor Panel Spares Specified for BAE Regional Aircraft

BAE Systems has announced the appointment of M.C. Gill Corporation Europe Ltd. as the sole distributor of Floor Panel spares worldwide, effective December 1, 2001. M.C. Gill Corporation Europe Ltd. has been supplying completed floor panels to BAE programs over the last fifteen years, accumulating vast experience in this area. The company is well positioned to provide spares support to the following aircraft:

- **BAE 146**
- **ATP**
- **Avro RJ70, RJ85 and RJ100**
- **Jetstream 31, 32 and 41**

“We’ve been supplying flooring panels, and other materials, to BAE for a long time, so our Insoleq trademark will commonly be found on BAE aircraft parts. These panels cover the entire floor area of an aircraft, including the passenger cabin, cockpit, cargo floor, any of which may need replacing at some time,” said Martin Canning, Director of Sales and Marketing – M. C. Gill Europe Ltd.

Additional information:

Martin Canning – Director of Sales and Marketing
M.C. Gill Europe Ltd.
Phone / Fax: 44-1275-881013
email: Martin.Canning@blueyonder.co.uk

THE FUNNY SIDE

The little boy greeted his grandmother with a hug and said, "I'm so happy to see you, grandma. Now maybe daddy will do the trick he has been promising us."

The grandmother was curious. "What trick is that, my dear?" she asked.

The little boy replied, "I heard daddy tell mommy that he would climb the walls if you came to visit us again."

★ ★ ★

The man walked over to the perfume counter and told the clerk he'd like a bottle of Chanel No. 5 for his wife's birthday.

"A little surprise, eh?" smiled the clerk.

"You bet," answered the customer. "She's expecting a cruise."

★ ★ ★

A boy and his family went to a fancy restaurant and the little boy said, "Daddy, I don't like cheese with holes in it."

His father said, "Well, just eat the cheese and leave the holes on the side of your plate"

★ ★ ★

One day a mailman was greeted by a boy and a huge dog.

The mailman said to the boy, "Does your dog bite?"

"No," replied the boy. Just then the huge dog bit the mailman.

The man yelled, "I thought your dog doesn't bite!"

"He doesn't," replied the boy. "That's not my dog!"

Trivia

During World War II a cat called Oscar served on the German battleship Bismarck. When the Bismarck was torpedoed, Oscar was rescued by a British sailor on board HMS Cossack. Five months later HMS Cossack was sunk, but Oscar was rescued by HMS Ark Royal. Only three weeks later a German U-boat destroyed Ark Royal and Oscar was rescued again. The naval authorities then decided that Oscar had had enough and posted him on land. According to British naval records, Oscar died in 1955.

★ ★ ★

In the great fire of London in 1666, half of London was burnt out but only 6 people were injured.

★ ★ ★

Frank Lloyd Wright's son invented Lincoln Logs.

★ ★ ★

Only one person in 2 billion will live to be 116 or older.

★ ★ ★

The name Wendy was made up for the book "Peter Pan."

★ ★ ★

If you yelled for 8 years, 7 months and 6 days, you would have produced enough sound energy to heat one cup of coffee.

★ ★ ★

Banging your head against a wall uses 150 calories an hour.

★ ★ ★

Women blink nearly twice as much as men.

★ ★ ★

Right-handed people live, on average, nine years longer than left-handed people do.

★ ★ ★

The sentence "The quick brown fox jumps over the lazy dog" uses every letter in the English language.