



Member Article

Classic Glass

By Curt Radford, MD, co-founder of Chris-Craft Commander Club. As seen in "Classic Boating" July/August 1997



Several years ago, I attended an antique and classic boat show on the Lake Winnebago system in Wisconsin. As I was docking our 1967 38' Chris-Craft Commander, I was met by a very angry show representative who demanded that I leave. When I asked why, I was told, "You know why." The implied reason was that our boat was of fiberglass and not of wood construction. I argued that our boat was older than many there on display. Despite this fact, we were not able to tie up the boat. Another show representative appeared and explained that the protected but temporary dock system set up for the show would not be able to accommodate our large cruiser. He kindly helped us maneuver our boat to another location away from the show and tied us up with other fiberglass cruisers of modern vintage. We were not allowed to enter the show even though a fiberglass Century runabout was registered and on display at the show.

Brock Yates, a regular featured columnist for Boating magazine, received a similar reception when he took his 1966 16' Donzi to an antique boat show in Alexandria Bay, New York. Although he was allowed to enter his boat at the show, many wooden boat enthusiasts considered his boat's presence a "heresy." Some labeled his boat "plastic;" others called it a "Clorox bottle." Needless to say, Mr. Yates' boat did not win any awards. Unfortunately, there is a bias in antique and classic boating circles that frowns upon fiberglass boats from the 1950s, 60s and 70s.

Not long ago, I attended a classic Corvette car show in the area. Fiberglass Corvettes were just as welcomed and esteemed as their steel counterparts. Hence, it makes no sense for classic boat shows to ignore fiberglass boats of classic vintage. The purpose of this article is to trace the history of the development of the fiberglass boat and, more particularly, the 38' Chris Craft Commander, the first Chris Craft all fiberglass cruiser. Perhaps this will help serve to eliminate some of the current bias against classic fiberglass boats. According to the Antique & Classic Boat Society's classifications of antique boats, a classic is a boat built between 1943 and 1968 inclusive. Clearly, our 1967 Commander, according to this description, irrespective of the hull material, is a classic.

History of Fiberglass

According to the World Book Dictionary, fiberglass is defined as "very fine, flexible filaments of glass; spun glass." The fibers may be many times finer than human hair and may look and feel like silk. Before the time of Christ, Egyptians used glass fibers for home decorations. An American glass manufacturer, Edward Drummond Libbey, exhibited an all fiberglass dress at the World Columbian Expo position held during 1893 in Chicago. Germany used fiberglass as a substitute for asbestos during World War I.



Member Article

Not until the 1930s were the Owens-Illinois Glass Company (now called Owens-Illinois, Inc.) and the Corning Glass Works able to develop practical ways to manufacture fiberglass commercially. Since then, when combined with plastic, fiberglass has been used to make a wide variety of products including textiles, automobiles, boats, swim swimming pools, insulation, fishing rods, etc. Fiberglass has been around for a very long time and is not necessarily a new construction material.

Fiberglass is manufactured from sand and other raw materials which make up glass. One way of making fiberglass consists of taking these raw materials and heating them into small glass marbles which can be screened for impurities. These marbles are then melted down in furnaces which have tiny holes at the bottom. As the fiberglass strands are extruded from the furnace, a spinning drum winds them on bobbins similar to winding thread on spools. This drum spins rapidly, which lengthens and thins the fiberglass fibers. These fibers can then be twisted into yarns or cords. The yarns are then woven into cloth, tape or other types of fabrics.

Another method of fiberglass manufacturing called the "direct melt process" eliminates the marble making steps. Bulk fiberglass or fiberglass wool is made some what differently. Again, sand and other raw materials are melted in a furnace which has tiny holes at the bottom. As the melted glass is extruded from the furnace, high Pressure jets of steam catch and lengthen the fibers from 8 to 15 inches. The fibers are then collected on conveyor belts in the form of a white wood-like mass. When fiberglass is mixed with plastics, the end product is extremely strong and lightweight. It also is very pliable and can be molded, shaped, twisted, and poured in many different ways. It is an ideal product for making car bodies and boat hulls, and allows designers much more freedom of expression in their designs.

The Marine Fiberglass Revolution

With the availability of commercially manufactured fiberglass, the boating industry took to fiberglass like a duck to water. Noted designers like Jim Wynne, Ray Hunt, Jack Hargrave, Don Aronow and Walt Waiters designed new fiberglass boats in the 50s and 60s that resulted in an explosion of the boating market.

By the early 60s, Al glass (Pacemaker), AristoCraft, Bertram, Boston Whaler, Century, Chris-Craft, Correct Craft, Donzi, Evinrude, Glastron, Hatteras, Mathis, Owens, Sea Ray, Thompsonson, Thunderbird, and others had new fiberglass boats plying the waters. These new fiberglass products helped open the sport of boating to millions of people who did not have the time, money or patience to purchase and maintain wooden boats.

Chastened by this experience, Chris-Craft decided that fiberglass was not the material to build boats from and sold the molds and the business shortly thereafter. Chris-Craft dealers, however, began to clamor for fiberglass boats as quite a number were then becoming available. In 1959, therefore, Chris-Craft launched the new 19-foot Silver Arrow, a beefy, fiberglass encased spruce and mahogany runabout boat. This boat was expensive and quite heavy. As a result, it did not sell well and production was terminated after building only 92. In 1955, Chris-Craft first used the new fiberglass technology with the introduction of the new Cobra run about. The dorsal fin and engine cover were made of fiberglass. In 1957, Chris Craft bought a small boat manufacturer from Pompano Beach, Florida, who made the 15 foot fiberglass Lake 'N Sea out board runabout. This became Chris-Craft's first fiberglass boat. Unfortunately, this new boat was basically a plywood boat swathed in fiberglass. It turned out the fiberglass tended to delaminate from the plywood and develop leaks. Hence, the Lake 'N Sea boats became known as Leak'N Sink.



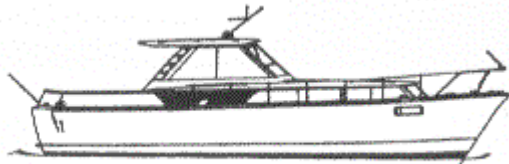
Member Article

Again Chris Craft retrenched and continued to focus on what they knew best - wood construction. Chris Craft began to use fiberglass, however, for cruiser superstructures as well as lavatory sinks, vanities, and the like.

In late 1962, Chris Craft surprised the industry by announcing that they were planning a new 35' all fiberglass sloop rigged sailboat of which 20 were built in 1963 at Algonac. This was to be the first of eight sailboat models built in fiberglass by Chris Craft. This series helped advance Chris Craft's lagging fiberglass boat program. Also in 1962, a new Research and Development Center was built in Pompano whose main function was to focus on fiberglass construction techniques. Additionally, Chris Craft purchased Thompson Boat Company of New York, which gave them a presence in the small fiberglass runabout and small cruiser market.

Meanwhile, larger cruiser enthusiasts had to listen to Chris Craft dealer arguments that "the Chris Craft people are the biggest build builders of large pleasure craft in the business. If they thought fiberglass was any good for boat construction, they'd be building boats of glass." Hatteras Yacht proved fiberglass was the large boat construction material of the future by launching an all fiberglass 41 footer in 1960. Chris Craft was beginning to lose market share to its competitors. The Golden Age of wood boats had come to an end and Chris Craft was falling behind.

The 38' Commander Express Cruiser



In 1963, intense activity was going on at the Pompano Research and Development Center and the new Fiberglass and Tooling Activity Division in Holland, Michigan. Holland became the focal point of Chris Craft's fiberglass cruiser program. A new free standing build building was added to the north mill end of the main building. Chris Craft Senior Vice President of Manufacturing and Engineering Bill Mackerer got together with a stylist and de-

signed a gorgeous new 38 Commander to be built entirely out of fiberglass. It was to be "Mac" Mackerer's last boat design before he retired. The 38' Commander was the culmination of Mac's nearly half century of design and production experience with Chris Craft.

The 38' Commander was built under strict secrecy. Holland's pattern and prototype shops were boarded off, windows were sealed, and doors were locked. The plugs, molds and ancillary tooling for the Commander were completed in 1963. This ground breaking cruiser had to have the best quality molds since they controlled the quality of the fiberglass finish on all subsequently produced hulls.

Chris Smith (Christopher Columbus Smith's grandson) saw to it that each mold was hand sanded. No machine sanders were allowed that could mar the hull's finish. He had a dozen people hand sanding the molds for a month. The Commander hull was made up from three molds: the bottom, consisting of one piece, and the two sides. The completed reinforced molds were quite huge and very heavy. Each one required a separate flat car when they were shipped down to Florida by train.

The 1964 38' Commander was built and shipped to the Chicago boat show without any of the Chris Craft dealers knowing anything about it. Likewise, this dramatic new design was unveiled at the New York National Motor Boat Show in January of 1964. The all fiberglass Commander captured everyone's attention as it stood perched at the top of the escalator on a giant, casted



Member Article

cradle.

The first reaction of most people boarding the Commander at the New York show was one of amazement at the generous size of the cruiser and its large interior. At the time, it was one of the largest fiberglass production boats in existence. The new Commander had a rakish yet rounded bow entry reminiscent of the Constellation.

Also featured were two longitudinal planing strakes as well as an attractive, molded in, circumferential spray rail (hull side foils). The boat had a full length keel with modified deep V gullwing planing surface. It had a distinctive V transom design which was borrowed from Chris Craft's World War II landing craft. This design was intended to improve the craft's handling characteristics in a following sea.



Exhaust was vented downward through dual pipes that exited the hull below the hull side foil to help eliminate exhaust fumes. Overall, the Commander had a modern, streamlined appearance produced by the horizontal, molded, curve linear lines of the spray rail, deck, cabin top, and pilot house top. The high gloss fiberglass exterior was a buff or off-white color which required no painting. The waterline boot stripe was painted in black. Bottom antifoulant paint was of copper base and color.

Chris Craft did not want the Commander to become another Leak'N Sink model. As a result, Commander hulls were up to one inch thick and had all fiberglass stiffening and stringers. In addition, Commanders had self supporting hulls which did not rely on bulkheads or other internal supports. Chris Craft proudly claimed to have the highest fiberglass to resin ratio in the industry. A new structural reinforcer called Synkore was utilized in sandwich construction applications such as decks and cabin tops. This material provided greater strength than balsa or plywood and was not susceptible to rot. The Commander hulls were virtually bullet proof and built to withstand three times the strains and stresses of running full throttle in 6-foot seas.

As mentioned, Chris Craft spent a lot of time in mold preparation and sanding. Boughton Cobb, Jr. wrote in *Yachting* that it "is one of the most beautiful fiberglass moldings we have ever seen. The high gloss finish, the absolute fair form of hull and superstructure are the product of carefully built Precision molds."

The painstaking preparation of the molds and the use of high quality gel coat by Chris Craft resulted in hard, mirror-like finishes that even to this day do not need painting. The Commander hulls were not Prone to blistering as are some of today's more thin skinned boats. Chris Craft made a top quality fiberglass boat. The 38' Commander's hull alone weighed 6,000 pounds. Deck and cabin structure added another 900 pounds. Fully fitted with engines and other gear, the Commander weighed approximately 20,000 pounds. It had an overall length of 38 feet and a beam of 13 feet.

Forward freeboard was 62" aft free board was 50". It was a shallow draft vessel drawing only .



Member Article

three feet of water. Height, including mast, was 12 feet or 13 feet with optional flying bridge. Engine options in 1964 included twin Chris Craft 210hp V8 engines (under powered) or twin 275hp V8s. By 1966, 210 and 300hp Ford-Chris Craft engines were available along with 258hp General Motors diesels. Top speed was 33 mph with twin 300hp Chris Crafts which was quite impressive for a boat of its size. It carried 200 gallons of fuel and 75 gallons of water.

The immediate impression gained on stepping aboard the 38' Commander was one of amazement at the immensity of its cockpit and interior. Head room in the main saloon was 6'4" and in the pilot house 6'7". Interior dimensions of the cockpit are 9'1" in width in side the pilot house and 10'21/2" wide further aft of the side deck entry ways. Measured down the center line, the cockpit was 15'5" in extreme depth.

The pilot house along with the entire interior were finished in sable walnut stained mahogany with a satin finish. And additionally, the Commander featured a one inch thick solid teak circumferential toe rail. The Commander was a six sleeper cruiser. Forward cabin bunks were 6'4" in length and 2'3" wide. The forward cabin was ventilated with 20" x 6" Port and star board portholes. Natural lighting was provided through forward and side cabin windows.

Located on the portside at the rear of the cabin was a hanging locker 20-1/4" wide providing a shelf for lamps, a TV, radios, and the like. Forward was a divided rope locker, a screened hatch, underbunk storage age, and a cushioned cabin seat along with shelves ranging along both sides of the berths. A sliding paneled door provided privacy from the main cabin. The starboard lavatory compartment had dual access through 20" doors both from the forward and the main cabins. The lavatory included a shower, turquoise fiberglass vanity with wash basin, electric operated head, mirror, medicine closet, and two storage areas. Hot and cold running water was standard.

Entering the saloon from the pilot house, one encountered an L-shaped galley to port with a General Electric refrigerator and 3 burner electric range oven. Both appliances were finished in turquoise blue. The galley was completed with a sink and both over head and underneath cupboards. The galley countertop and the dinette table further forward were both finished in off-white formica. The port sliding convertible dinette was 6'3" long and 37" wide. When converted, it provided a comfortable berth for two.

To starboard was a large aft clothes locker which could be used to store bumpers and created a built-in shelf for lamps, decorations, etc. Adjacent to the locker was a day sofa that converted to two bunks, each measuring 2'38" by 6'3". A total of six additional storage drawers were located under the dinette and the day lounge. The pilot house included a downward folding helmsman seat and an optional companion seat. Both were upholstered in turquoise vinyl and could seat a total of four people.

Pilot house and cabin interior overheads were fitted with acoustical white vinyl headliners. Dinette, day lounge and forward bunks were upholstered in a teal color, rough textured linen made by Craftex Mills. Chris Craft decorators termed the upholstery color as "Regency Teal." The draperies of the saloon, forward cabin and lavatory featured a rounded, diamond collage pattern termed "Siwana Collage." Standard cabin decorating included an off-white berber, looped pile carpeting made by Forrest Mills. Additionally, a beige vinyl grass cloth manufactured by B.F. Goodrich was used to finish the vertical lavatory, dinette, and galley surfaces.



Member Article

Overall, the interior gave one a light and cheerful yet elegant impression. The 1964 38' Commander Express Cruiser (FXA38) was a revolutionary boat for Chris Craft. Its classic Mac Mackerer lines combined with more durable and maintenance free construction material made the new Commander a great success. A total of 262 38' Commander Express Cruisers were manufactured between 1964 and 1969. The interior decorating and upholstery remained the same from 1964 through 1967.

The earlier Commanders had an optional fixed fiberglass planing wedge available. These elevators were fibreglassed to the hull and were basically an integral part of the hull. Variation could be made depending on the various power options that were installed.

1968 Chris Craft literature touted a new "cruise control" option which consisted of built-in adjustable fiberglass trim tabs which allowed the pilot to achieve the most efficient planing attitude for speed, fuel economy, and various water and wind conditions. These trim tabs were faired into the bottom of the hull at the stern. Our 1967 Commander has them, so cruise control was first available in 1967. It was standard on all diesel models and became standard on all models in 1969.

Beginning in 1968, Chris Craft did away with the mahogany pilot house and cabin interiors. Instead, an imitation wood grained, plastic material was used for finishing. This decision reflected the then popular demand for maintenance free interiors as well as exteriors. The decorative teak toerail was used on all Commanders from 1964 through 1969.

The 1968 and 1969 38' Commanders were also redecorated. Interiors included gold draperies and carpeting and a new gold polypropylene plaid upholstery. Pilot and helmsmen benches were finished in gold vinyl.

The 1964 38' Commander Express Cruiser was priced at \$29,990 with 210hp Chris Craft V8 engines or \$31,990 with 275hp V8s. Major options available included a command bridge (\$2,980), closed cooling system (\$840), 6500 Watt Kohler generator (\$1,820), automatic CO2 extinguisher (\$505), Bendix automatic pilot with remote control (\$1,300), searchlight (\$385), depth sounder (\$365), and windlass (\$515), among others.

In 1966, a diesel powered (twin 258 HRGMD) 38' Commander Express was offered at \$48,840 along with a twin 300hp Chris Craft V8 model at \$32,590. The underpowered 210hp V8 was last offered in 1967. In 1968 and 1969, Commander Express models were available with either 300hp twin Chris Craft V8's or an option of twin 197 HR or 258 HR General Motors diesels.

By 1969, the 38' Commander Express with 300hp V8s had risen in price to \$37,790, though more options had become standard. The 38' Commander Express Cruiser as designed by Mac Mackerer was in production for six years from 1964 through 1969.

In 1970, Chris Craft launched a newly designed 38' Commander with a radically different superstructure while utilizing the same hull. Commander and Commander Sedan models were available. The cabin sides were extended flush to the sheer or edge of the boat, adding dozens of additional square feet of interior cabin space. Access to the bow was accomplished by walking on top of the cabin rather than on side decks. Hand rails extended along the top of the cabin on both sides for safety; unfortunately, they obscured the vision of the pilot. The fiberglass cabin sides extended nearly out to the tip of the bow, creating a "space age" look. A minimum of wood accents were utilized on the boat's exterior and interior, which featured a white empire walnut finish.



Member Article

The new 1970 Commander intro introduced a new "Integrated Electronic Command Center." This included a radio telephone, depth sounder, radio ground, antenna, engine shielding, and hailer along with prewiring for additional accessories. This was a novel modular system that was way ahead of its time. Whenever an owner had a problem, the affected module was swapped in the field by the dealer. This system subsequently proved unpopular with local dealers. It eventually was abandoned by Chris Craft due to unanticipated warranty problems and expense.

The 38' Commander as designed by Mac Mackerer ceased production in 1969. A redesigned 38' Commander utilizing the original hull was produced into the mid 70s when a poor economy and rising fuel prices led to the retirement of the model.

The 38' Commander Sedan

In 1965, Chris Craft was the world's largest boat manufacturer. The 38' all fiberglass Commander launched in 1964 was a tremendous success. As a result, Chris Craft established the Commander Series Fiberglass Division based in Holland, Michigan. Holland continued their retooling activities to change over from wood to fiber glass boat production. The majority of Chris Craft's fiberglass Commanders ended up being manufactured at the Holland plant to replace volume lost to the then rapidly shrinking sales of the medium sized wood cruiser.

In 1965, Chris Craft added a 4 sleeper 27' Commander, 38' Commander Sedan and 38' Commander Sport Fisherman models. A 31' Commander was added to the fleet in 1966.

In 1967, 42' Commander and 47' Commanders were launched, followed by a 35' Commander and 42' Sports Cruiser in 1968. These were followed by a mammoth 60' Commander in 1969 and a 55' Commander in 1970, the largest fiberglass yachts made at the time.

The Chris Craft Commander series helped Chris Craft maintain its dominance in cruiser production. The 38' Commander Sedan Cruiser was produced from 1965 through 1969. A redesigned version was sold in the early to mid 70s. All utilized the same hull as the pioneering 38' Commander Express model. This model featured an all enclosed deckhouse with sliding doors to allow access to the cockpit. A flying bridge option was also available.

The enlarged pilot house in the Sedan version had room for furniture to port and contained a convertible lounge to star board. The pilot's station was centrally placed as opposed to the port pilot station found in the Express version. A wardrobe was located forward on the starboard side. In effect, the pilot house doubled as a second saloon or as a third state room. As a compromise, the Sedan had a much smaller cockpit, 8'9" versus 15'5" long, and a slightly smaller main saloon than did the Express version.

The forward stateroom of the 38' Sedan was identical to that seen in the Express. The main saloon, however, was arranged quite differently. Upon entering the main cabin from the pilot house, one encountered a full length "L" shaped galley along the portside. This included a General Electric refrigerator, electric range-oven, sink, and a tremendous amount of storage space. To starboard was a receptor "L" shaped, lounge-dinette area with a triangular table. This dinette area could be converted into upper and lower bunks and included a pull-around privacy curtain creating a fully enclosed stateroom. Interior decorating in the Sedan models utilized the same color draperies, carpeting, and up upholstery used in the Express cruisers from 1965 through 1969.

The Express and Sedan 38' Commanders of the 70s had different deco rating schemes, though



Member Article

the same colors were used. The 1970 models were decorated in a patriotic red, white and blue scheme. The Chris Craft 38' Commander Sedan Cruiser (FDA38) also proved to be a very popular cruiser. A total of 189 Sedan cruisers were built between 1965 and 1969. Indeed, more Sedan versions were sold than the Express model in 1968 and 1969.

The 38' Commander Sedan had the same engine options as the Express model. In 1966, the 38' Sedan Cruiser with twin 210hp V8s sold for \$32,990. With twin 258HP General Motors diesels, the price jumped to \$50,940. By 1969, the Sedan model with twin 300hp Chris Crafts was sold for \$39,390 while the model with twin 258HR General Motors diesels sold for \$58,890.

The 38' Commander Sport Fisherman

Big game fisherman also took notice of Chris Craft's new 38' Commander. Because of this, Chris Craft offered the 38' Commander Sport Fisherman model beginning in 1966. The speed and seaworthiness of the Commander hull lent itself perfectly for adaptability to a sport fisherman.

The Commander Sport Fisherman had the same superstructure, layout, and decorating as the Sedan model with a few modifications. The pilot house did not have sliding doors and was only semi-enclosed. Opposite the pilot house lounge was a service bar with sink and ice box which came standard. The cockpit and pilot house floors were covered with teak-like nautilex vinyl planking rather than bare fiberglass and carpeting as in the Sedan.

The cockpit floor was recessed a step deeper than the pilot house floor to get fishermen closer to the water. Additionally, the stern safety railings seen on the Express and Sedan versions were absent on the Sport Fisherman. This provided for easier landing and handling of big game fish. The Sport Fisherman model included a standard flying bridge complete with dual controls, helm seat, instrumentation, guard rails, and ladder. Cruise control was standard with diesels only. Outriggers were an available option along with the other options listed earlier for the Express.

The Chris Craft 38' Commander Sport Fisherman Cruiser (FFA38) was manufactured from the 1965 through the 1968 model years. Sales of the Sport Fisherman were promising in its first year when 25 were sold. However, only an additional 15 were sold each year in 1966, 67, and 68. Hence, only a total of 70 Sport Fisherman Cruisers were sold, making this a rare model.

In 1966, it retailed for \$34,390 with twin 210hp Chris Crafts. With twin 300hp engines, the price was \$36,090. With dual 258HR General Motors diesels, the price jumped to \$52,340. In its last year, 1968, the 300hp gas engine version sold for \$38,590 while the diesel version sold for \$57,090. Due to Poor sales, Chris Craft dropped the Sport Fisherman model from its line in 1969. Most sport fisherman customers were opting for the 42' Commander Sports Cruiser instead.

As appeared in the July-August 1997 issue of Classic Boating