The GMC Motorhome was a brilliant, moonshot RV with a case of bad timing

Ronnie Schreiber
21 February 2020

1975 General Motors Glenbreek Motorhome front three-quarter Ronnie Schreiber

General Motors used to run its different brands and divisions almost like entirely different companies. Despite Alfred Sloan's hierarchy of brands, those brands competed with each other for corporate resources, and they competed with each other at the margins of their market segments. Sometimes the divisions would work together, to the shareholder's benefit, and sometimes they wouldn't. A lack of communication between GM's passenger-car drivetrain

group and General Motors' Truck & Coach division meant the premature death of one of the most advanced vehicles GM made in the 1970s—a vehicle that proved exceedingly forward-thinking in its vision. Its demise was so ill-timed that for the first time in the company's history, perhaps the only time ever, GM sold uncompleted vehicles to the public.

That ill-fated, brilliant vehicle was the GMC Motorhome. It's unclear why GM decided to get into the boom-and-bust RV business in the early 1970s, a decade that saw the price of oil skyrocket, but that's exactly what happened. As was GM's wont at the time, enjoying its status as the largest automaker in the world, the General threw considerable resources at the Motorhome project.

At the time, most motorhomes were built on heavy-duty truck chassis, and the rest of the construction was more like a mobile home than a truck or automobile. An RV might have a dualie rear axle, but the standard format was two solid axles, leaf springs, and a conventional drivetrain layout with an engine up front driving the rear axle via a long driveshaft. That arrangement meant the body had to be built on top of the chassis, above the driveshaft, raising the center of gravity and overall height. Little consideration was given to aerodynamics.

With the Motorhome, GM didn't simply rewrite the book on building recreational vehicles—it threw that dowdy tome away and wrote a completely new volume in a different language. The first decision was clever and led to much of the Motorhome's success; but it also planted the seeds of design's demise. Instead of an existing medium- or heavy-duty truck platform with a conventional drivetrain, GM created an entirely new platform. The final design was assembled by the Truck & Coach division but powered by an automotive drivetrain—and a front-wheel-drive one at that: Oldmobile's relatively compact Unitized Power Package (UPP).

Ronnie Schreiber

That drivetrain, originally featured in the 1966 Toronado, in the Motorhome was comprised of a longitudinally mounted 455-cubic-inch V-8 and the TurboHydramatic 425 transaxle. That novel automatic transmission separated the torque converter from the planetary gearset, connecting them with a purpose-built multilink chain. That allowed the transmission to be rotated and placed next to the crankcase with its output shaft facing forward into the final drive for the front wheels.

The big V-8 had plenty of torque and power for a vehicle that eventually stretched to 26 feet long. By using the front-wheel-drive layout, the Motorhome didn't require a long driveshaft or a driven rear axle, which let GMC engineers build the body lower.

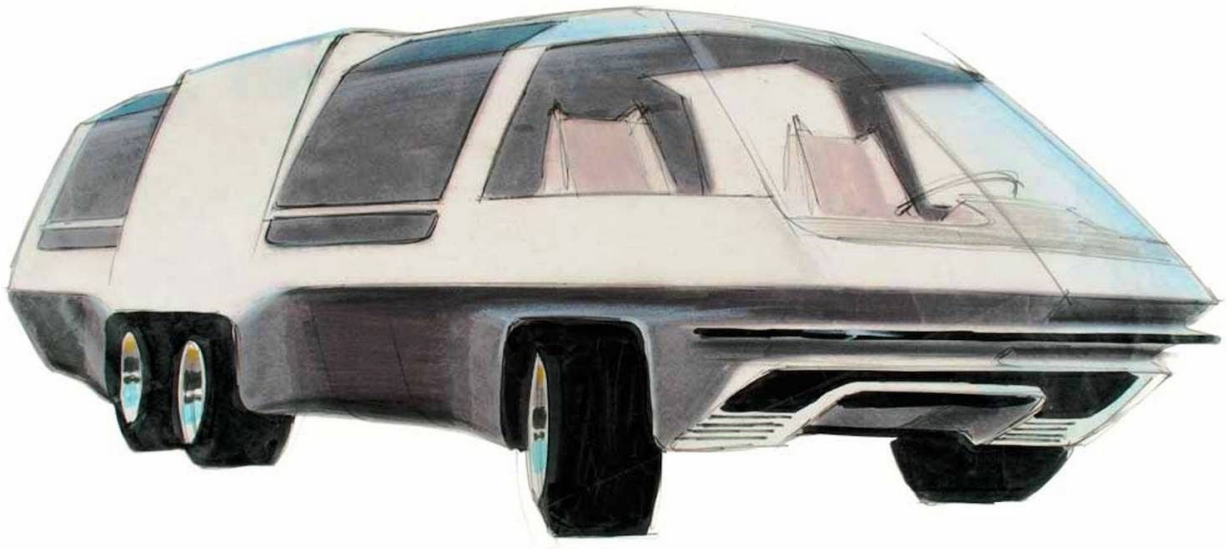
The new front-wheel-drive platform also allowed them to use a trick setup to run four rear wheels. Instead of a dualie live axle, GM engineers designed a bogie setup, similar to how a railroad car's tandem wheels are suspended. Because there is no rear axle, the wheels, tires, coil springs, and the air bags for the auto-leveling system all sat on the outside of the perimeter

frame. Two fuel tanks rested safely inside the frame, where the rear axle would have been. All of this allowed a completely flat floor, stretching from the front of the Motorhome to the back.

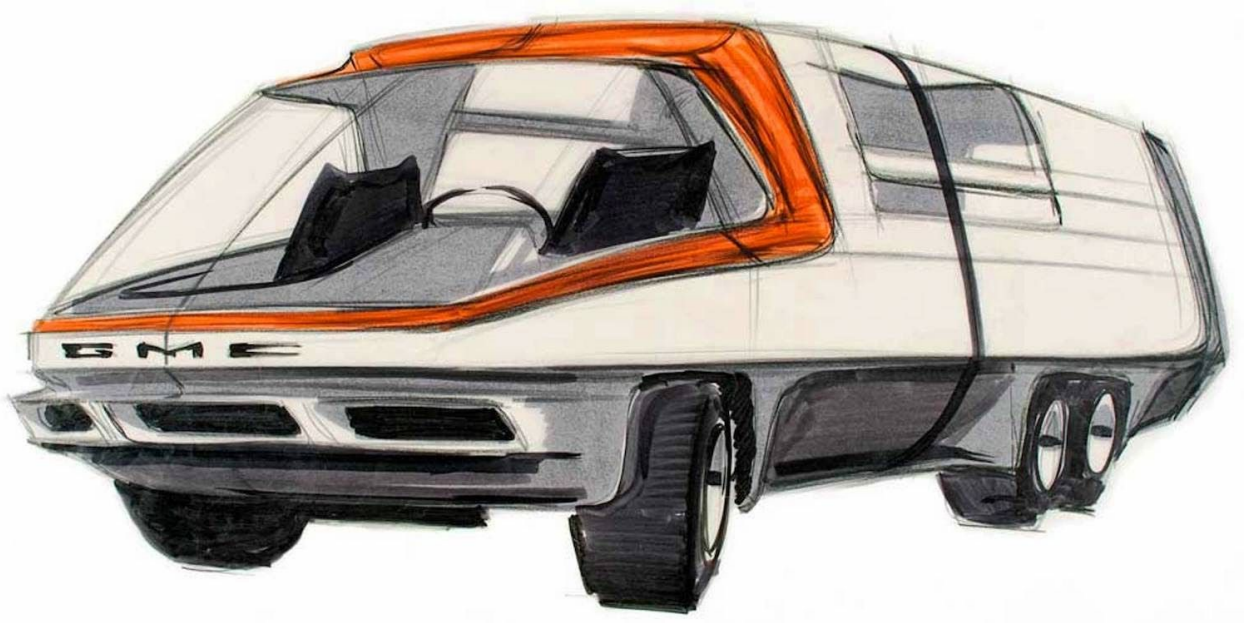
The low center of gravity helped with handling, while the lower ride height improved ingress and egress. In addition, GMC's RV sported better aerodynamics thanks to its smooth underside.

Unlike the "stick and siding" mobile home construction methods then used in most of the RV industry, GM mounted a welded aluminum body frame onto the chassis. GMC might have borrowed the idea from Wally Byme, though his Airstreams used aircraft rivets, not welds. The lower body panels, below the belt line, were made of fiberglass while the upper sides and roof were aluminum.

That body looked like something out of Star Trek. GM designer Paul Deesen sketched a radical body that would have been at home in one of Syd Mead's landscapes, and much of the basic shape survived intact into production. The use of fiberglass allowed for smooth, flowing shapes, again unlike the boxes on wheels that Winnebago was making. Large, curved glass windows mounted flush to the body, and a variety of very 1970s color and striping schemes were available.



flickr / ejd1984



flickr / ejd1984

Sold in 23- and 26-foot versions, with a plethora of interior layout and décor options, the GMC Motorhome sold pretty well for such a large vehicle, especially when GM was downsizing most of its passenger car fleet to meet the new energy realities. The Motorhome's success was partly to its slick shape, which allowed it to achieve double-digit mpg figures. Manufacturer's suggested retail base price was $14,569.06 for the 26-foot motorhome and $13,569.06 for the 23-foot version (roughly $89,900 and $83,700 today, converted from 1972 dollars). A total of 12,921 Motorhomes were sold from 1972–1978. While GM had a contractor trim the interiors on most Motorhomes, a small number went to specialty converters to be made into ambulances, command centers, and the like.

Since the body was made up of fiberglass and aluminum, and the suspension components were made by a division used to making city buses and heavy duty trucks, it's not surprising that the vast majority of those 12,921 GMC Motorhomes are still on the road. There are more than 7000 in the official registry and it's estimated that as many of 9000 are still in use. Even today, they still look more edgy than some contemporary recreational vehicles.

On November 11, 1977, GM's Truck & Coach division announced that it would discontinue production of the Motorhome. At the time, GM pitched it as a profitability move, but the news came as a shock to production employees and engineers working on the Motorhome program. Apparently, Truck & Coach never got the word that Powertrain was discontinuing the big Toronado/Eldorado drivetrains.

GM was just then introducing its newly-downsized sedans. The UPP drivetrain was going away, to be replaced by smaller displacement engines mounted transversely in front-wheel-drive platforms. Without that production UPP drivetrain, GM couldn't make a convincing business case for converting another engine and transmission for the Motorhome.

Ronnie Schreiber

At the time, news reports said that the assembly line at Truck & Coach Plant #29 in Pontiac simply stopped, leaving Motorhomes in whatever stage of construction they happened to be when powertrains ran out. That was all there were and there weren't going to be any more. (At least that's what I recall *The Detroit News* and *Detroit Free Press* saying when they covered the story.) However, this fairly complete 2004 history of the GMC Motorhome published by *Family Motor Coaching* magazine says that there was an orderly plan to phase out production, with parts inventories matched to dealer and customer orders. It also indicates that there were indeed plenty of transaxles still available when production ended, as an Ohio Motorhome dealer bought 1361 transmissions and final drives at the sale price of $495 each for the set, marked down from $2050, and that there were units in stock as late as 1983.

According to what I remember, in what was perhaps the only time General Motors has sold uncompleted vehicles to the public, the automaker held a sale at the Pontiac assembly plant and invited the general public to come in and make bids on the unfinished Motorhomes. It wasn't such a terrible idea. For folks who are handy, trimming out the inside of a van or RV isn't too huge a project, and if the unfinished Motorhome needed a powertrain, well, there were plenty of Toronados and Eldorados in the junkyards at the time.

As discussed, much of this is according to my recollection, which includes a rather sharp vision of bargain hunters being interviewed at the Pontiac facility by *The Detroit Free Press* on the day of the sale. According to the available historical record, however, I'm not sure that's how it really happened. We're sticklers for accuracy here at Hagerty and I wouldn't want to let the so-called Mandela Affect convince me of a false memory, so I checked with Kim Weeks, who runs the GMC Motorhome International club and she said that while my version of the story sounded vaguely familiar to her, I really should check with Bill Bryant, who is a GMC Motorhome historian.

Bryant told me that he can't say that the way I remember things is true, but that he also can't say for sure that it didn't happen that way. Most of the folks who would know, Bryant said, are no longer alive.

It looks like a deep dive in the newspaper archives at the Detroit Public Library's Burton Historical Collection is in order. In the meantime, if you remember things the same way I do, or know for a fact that my memory is faulty, please elucidate in the comments below.

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber

Ronnie Schreiber