Motor Home Engineering Department

presents

OPERATION

"Conquest"

June 12, 1974
Good Morning, ladies and gentlemen, and welcome to the preview of General Motor’s latest entry into the Motor Home market — Eleganza II.

It is with a great deal of pleasure the Motor Home Engineering team takes this opportunity to introduce to you the new features incorporated in this outstanding vehicle.

Since the first GMC Motor Home rolled off the production line in early 1973, recreational vehicle fans recognized it as a fresh, exceptionally styled concept in recreational vehicle design.

The “box on a truck” appearance and the “add-on” components of competitive vehicles were suddenly outdated by the sleek aerodynamic lines, superb ride and handling, and the “designed-in” comforts of the GMC Motor Home.
Over three thousand GMC's have been sold to customers since production began. In color-coordinated comfort, families have travelled the length and breadth of our country, from the snowy hills of a Maine winter, to the broiling desert of Death Valley in summer. In fact, one of our Motor Homes was seen climbing the 6000 ft. trail over Hatcher's Pass in Alaska!

However, as C. F. Kettering once remarked, "nothing is so good that it can't be improved".

From our test reports, constructive customer comments, and our own divisional people who have driven Motor Homes for evaluation, we realized the opportunity for improving the vehicle.

The temporary shut-down of production due to the fuel shortage last winter gave us an unusual opportunity to achieve certain improvements.

**MOTOR HOME OPERATION "CONQUEST"**

Control Overall Net
Quality Upholding
Elegance Stamina & Trust

This opportunity was seized and operation "Conquest" initiated. Incidentally, this project name can be seen to depict some of our overall objectives, that is, control overall net quality, upholding elegance, stamina and trust. This concept of "Net Design" has assured that all new features are an integrated design for total vehicle quality.

To reach this goal in a limited span of time, the Motor Home Engineering Department expanded its work force and selected engineers who were experts in their various design areas. Care was also taken to select the type of individuals whose positive personality and understanding of the natural laws of the universe would result in a harmonious vehicle without conflict.
This highly enthusiastic team, led by innovative managers, have accomplished the goals for the introduction of Eleganza II in a very short period of time. The engineering managers are here today and anxious to tell you their story in the chassis, body and interior areas.

Starting from the ground up, as the dramatic story of Eleganza II unfolds, I know your enthusiasm will be sparked and your sales increased.

Jim Cote' manager of the Chassis Engineering section, will begin this impressive story.
Good Morning, ladies and gentlemen. I'm happy to introduce to you this morning four areas of new chassis design concepts incorporated into the Eleganza II. These changes in our rear suspension air harness, in the vehicle GVW rating, in the electrical system capacity, and in the driver's controls, typify our ongoing engineering efforts to provide you with the best Motor Home chassis in the "RV" industry.

The new rear suspension air distribution system consists of separate, pre-assembled, color coded, nylon harnesses. Overall system integrity is enhanced through the elimination of eighteen threaded fittings and through the use of leak-free "O" ring fittings at each of the remaining threaded connections.
Each harness will be received cut to exact length, completely assembled to the "O" ring fasteners and 100% leak checked under water at 150 psi pressure. This new concept will minimize the possibility of air system leaks, thereby reducing the air compressor duty-cycle.

The GVW rating of Eleganza II has been increased from 11,200 lbs. to 11,700 lbs. The change has occurred in the gross axle weight rating of the rear axle. It has been increased from 7,000 lbs. to 7,500 lbs. This increased load carrying capability has been built into the vehicle through three major structural improvements.
The foundation of the new heavy-duty structure is a new frame bogie-liner assembly with new crossmembers made of special alloy steel which has been increased 50% in thickness. Suspension loads are evenly distributed throughout the structure by the addition of alloy steel crossmember gussets.

The key to the increased axle rating is the rear suspension where all working members have been redesigned. Development work began on this new suspension last November, and we ran vehicles around the clock, seven days a week, to accumulate nearly 45,000 miles of Belgian Block Durability schedule by the end of the program in April. This is the equivalent of nearly 650,000 highway miles, at the new 7,500 lb. load, on our eleven sets of experimental suspension designs. Each component has been engineered to provide increased load carrying capability, improved production quality and balanced outstanding durability characteristics.
Larger rear wheel bearings are the third element in the rear axle rating. The increased capacity bearings, which are now in production, have millions of proven service miles in truck applications.

The new GMC Motor Home electrical system has been designed to provide balanced electrical capacity to meet the living needs of the Motor Home owner.

The frame mounted battery tray has been changed from a double to a single battery installation.

This battery is the vehicle battery and meets the forward automotive electrical needs.
The living area battery has been moved rearward to the area formerly used by the motor generator battery. It serves as both the M-G. battery and as the living area battery. Its capacity has been more than doubled, however, going from 72 amp. hours to 150 amp. hours, while battery durability has been increased through the application of "deep cycle" battery design. The "battery boost" feature has been retained, but changed from a continuous to a momentary switch. This will insure that the vehicle battery will never be drained overnight by living area electrical loads.

Additional RPO living area battery capacity is now available to meet the increased duty-cycle requirements of the hunter, fisherman or remote camper. The RPO battery is also of "deep cycle" design and has a 205 amp. hour capacity, which provides a significant level of increase over the 150 amp. hour base battery.

Several changes have been made in the driver's area to improve the appearance and function of the control systems.
The new suspended accelerator pedal, which incorporates many functional design improvements, also results in a cleaner, more balanced, driver's foot-well area.

The new three spoke steering wheel with Rosewood applique is coordinated with the new Dark Saddle instrument panel and provides improved horn operation.

Steering column, shroud and hand brake parts are all color coordinated with the Dark Saddle instrument panel.

I think you'll agree that these changes will make the best Motor Home chassis even better.

And now, to review changes in the Motor Home body, I would like to introduce the manager of our Body Section, Jerry Vallad.
Thank you Jim, and Good Morning, ladies and gentlemen.

As with the previous GMC Motor Home models, very careful attention has been given to the overall exterior styling theme of the Eleganza II.

Accenting the new exterior are raised "GMC" letters with chrome high-lights. They have been added to both the front and rear of the vehicle, replacing the former vinyl decals.
With pride, it will now be possible to readily identify our Motor Home as a "GMC" product.

Numerous other modifications have been made in the front and rear fiberglass panels to achieve "Net" design. The outcome will be improved body panel joints with a smooth, finished appearance.

Likewise, the windshield, all windows and the rear access doors will now fit and function much better.
Inside the vehicle, the driver's compartment is also richly color coordinated with the new interior.

The wood grained instrument cluster bezel further enhances the overall appearance of the driver's compartment.

To assure that the "beauty" of the GMC Eleganza II Motor Home is not considered "skin deep", we have made several engineering improvements in the body area.
First, the floor from the front step to the rear of the vehicle has been completely redesigned. This is a photo of the new floor understructure as it appears in the production prototype. A ladder type construction has been achieved with lateral support members closely spaced for the entire length of the floor.

The cross sectional shape of the lateral members, shown on the left, was very carefully defined by computer to optimize the material used for maximum stiffness and minimum weight. The longitudinal side member sections in the center and on the right were established in a similar fashion, with the resultant understructure assembly having increased body torsional and beaming rigidity.
The floor plywood surface, as shown in the prototype vehicle, has been reduced in thickness from 1" to 3/4" and is no longer machined to fit within the understructure. This design approach results in a reduction in quantity of plywood pieces from 7 to 4, and provides space beneath the floor for insulation.

The end result of the new floor concept is a dramatic increase in overall beaming stiffness when compared with the original design. This increased stiffness, coupled with improved body torsional and beaming rigidity, will result in a solid, quiet vehicle.

The new floor allowed design of a heavy duty aluminum enclosure for the M-G set to replace the former fabricated plywood assembly.
This was also the case with the LPG enclosure, with both compartments well sealed and insulated to isolate noise, heat and cold from the interior living area.

The access doors for both compartments have been revised for improved function and durability.

Included are rubber retaining hooks which have been added to each door to provide a means of holding it in the open position.

This is accomplished by attaching the free end of the hook into the rear window channel with the door raised.
The side entrance door has also been redesigned for improved operation and appearance. Included is a larger, softer, one-piece seal which replaces the more rigid four piece type used in prior vehicles. The new seal will allow increased compression and has less potential leak points because of its one piece design.

The door periphery structure has been stiffened and is now slightly overcrowned at the top to assure proper door fit and compression of the new seal.
Improved sealing of all body related components has been accomplished, including the windshield. Application of "Net Installation" techniques and a new seal has resulted in a vastly improved seal-to-glass fit, especially in the four corner areas.

The driver's side windows have been redesigned with a new frame and improved seals. These changes will result in a well sealed, neat appearing driver's side window.

The rear access door glass seal has also been redesigned to contain vulcanized corner pieces for a better fit and elimination of unsightly puckering experienced with the former seal.
For owner convenience, another door related change has been made; namely, a reduction in the required number of vehicle keys from 4 to 2. There will now be one ignition key and one door key for the main entrance door, glove box and the city water and electric door.

Retaining fasteners for the rear access door have been changed to provide better door retention, increased sealing reliability, and better serviceability.

The new 5/16" diameter "Hi-Lo" thread type fasteners replace the former 1/4" diameter machine screw and threaded inserts.
To complete the sealing program, we have carefully selected sealants, sealer tapes and mounting fasteners for use at all body seams and for mounting of components or accessories. These extensive measures will result in the Motor Home being properly sealed when it leaves the factory.

Last, but by far not least of the body improvements, is the careful attention that has been given to a complete insulation package. In the main body area we will continue with sprayed polyurethane foam in the rear end caps, the main body, the sides, and the roof cap area of the driver's compartment.
Improved application of the foam insulation will result in generous coverage throughout the entire body with this very excellent material, which has the highest insulation factor available. Another by-product of the sprayed foam is its accoustical insulating characteristic and its adhesion to all mating surfaces to dampen body panel vibrations.

The insulation package also includes a pad of 1/4" "Ensolite" added under the toe pan mat.

In addition, the insulation pad in the lower area of the dash has been doubled in thickness. These changes improve the over-all temperature control of the driver's compartment.
The most significant addition to the insulation package in the Motor Home is the heavy duty floor insulation. It consists of rigid polyurethane foam panels bonded to an aluminum protective skin and, in turn, to the new floor and sub-structure.

This heavy duty floor insulation will improve performance of the heating and air conditioning systems under normal and extreme operating conditions.

This completes our summation of the body design improvements, which will greatly enhance the overall "character" of the GMC Motor Home thru improved appearance, function and durability.

Now, I would like to introduce Mrs. Nancy Bundra, manager of the Interior Design section.
In the early spring of this year we gained the opportunity to redesign, upgrade and install the Motor Home interiors at GMC Truck & Coach.

This program officially began on March 18 with a management meeting popularly called the "Interior Kick-off" meeting.

From our initial release of the Motor Home, we realized the interiors were our weakest area. In redesign, we took into account our customer input letters, field reports and what was, in many areas, obvious to the engineers and management. Our objective was to establish a new level of product quality and product function that is unique to the Motor Home industry.

GM design staff presented us with four decors to choose from:

We chose "Eleganza II" for our initial release,
To be followed immediately after with "Palm Beach".

We are also contemplating "Tiffany".
The "Kingsley" is also being considered; however, positive decisions have not been made for the release of "Tiffany" and "Kingsley".

In the driver's and passenger seats, comfort and ease of operation are combined with elegance, luxury and fine furniture custom appearance in the new "El Capitan" bucket seat by Flexsteel.
The seat structures are all steel-welded frames with sinuous springs to provide residential type comfort. The exterior finish includes thermo formed parts of ABS polycarbonate plastic for beauty and durability.

GMC personalization is achieved with the use of Collins and Aikman automotive type fabric and the design staff trim pattern.

The front and rear living compartments feature comfort and ease of conversion combined with fine furniture custom appearance in the new fully articulating padded dinette.
The rear facing settee

and davo by Flexsteel.

The structures are all steel welded frames with eleven gauge no-sag sinuous springs for seating and sleeping comfort.
The cushions of 3-1/2" thick 1.8 lb. urethane foam wrapped with 1.0 oz. bonded polyester fibers complete the package for a totally luxurious, high quality look.
The front dinette is adjustable, providing two seating positions; padded wall trim completes the picture of the all padded dinette and rear facing settee.

The new butterfly folding aircraft type table has cork glass holders exposed when in its folded position. The table drops when the seats are converted to a bed or is completely removable to create a lounge area effect.

The table edge and leg are real wood Mahogany, stained to complement the Rosewood, creating an elegant appearance.
Highly skilled General Motors tool and die pattern makers have completely redesigned the construction criteria for the wooden modules. The modules will be manufactured by specially selected, long established cabinet and furniture manufacturers.

High pressure laminate will be used on all exposed areas, including interior module finish. The new laminate color and pattern design simulates the natural richness of high gloss Rosewood. High pressure laminate has inherent qualities that will impress owner's wives, in that it is stain, water and heat resistant beside being easy to clean.

The quality of construction is typified by dove-tailed and glued joints on drawers. The use of staples has been eliminated.
All closet drawers have dust covers, which is typical in high quality furniture, but unique to the motor home industry. The drawers are constructed of selected superior grade poplar wood with the interior portion hand sanded and sealed to provide no-snag surfaces. Steel drawer guides with ball bearing slides are also incorporated. The drawer interiors will be wood burned with the logo "Quality Built By GMC".

The interior surface of the closet module has been redesigned to provide more adequate hanging space. A full length, 15" x 48" tempered glass mirror will be mounted on the inside of the closet door.
The construction criteria of the overhead cabinets has also been completely redesigned by General Motors pattern makers. The major features are a double bottom providing a cavity to hide wiring; also, the interior is of high pressure laminate finish.

Cabinet end caps will be molded foam with self skinning urethane.
The galley features a 7-1/2 cu. ft. all electric, 12 volt/110 volt refrigerator as standard equipment.

The galley top has been redesigned to provide better accessibility to the drapery for ease of installation and removal.
The galley top has a stainless steel double bowl sink with single handle control faucet of superior quality and an adjustable spray spout.

The sink top features cutting boards of Maple, with the reverse side being a serving tray.
The new three burner range incorporates a full size black glass oven door, an oven light, and a pivoting range top for ease of accessibility to pilot light area, and provides more positive retention for the range top. There are two separately controlled pilot lights, with a main gas line shut off valve, as well as individual top burner and oven pilot shut off valves. These safety features are unique to the range used for the GMC Motor Home.

The fiberglass bath module features all new towel and tissue holders of chrome plated metal.

The vanity mirror is tempered glass. A new shower drain with plug prevents dirt and foreign objects from entering the drain system.
The headliner and upper wall panels are new foam cored, open cell foam backed, with a surface finish of perforated textured vinyl, which provides superior thermal characteristics as well as providing acoustical qualities. The surface is highly cleanable and creates an upholstered high quality appearance.

The lower wall panels are 1/8" tempered hardboard laminated with polyester for increased durability.
All drapery including windshield and driver compartment is standard. New drapery installations were redesigned for increased accessibility and improved reliability.

The drapery track system is all new to provide smooth actuation.
The drapery now provides excellent coverage of all window areas. The high quality blackout lining provides improved temperature control and privacy, and the rear compartment has a luxurious wrap around effect.

The drapery is now held in place with non-metal fasteners to prevent rust stains.
The new plumbing for the fresh water system features polybutylene in place of copper tubing, to provide anti-rattle and freeze protection characteristics.

All other plumbing was completely re-engineered to provide non-rattle and easy access for repairs. The water supply system also includes an improved water tank with an overflow check valve and screen, and an in-line filter. The water pump was equipped with its own check valve.

The new hose type water tank filler will keep contaminates from entering tank.
The standard forced air system, which was 22,000 Btu has been increased to 30,000 Btu with a ducted return air system as standard equipment. The constant spark ignition feature means you will never manually start your pilot light. A combination of cast aluminum oven burner and highly efficient heat exchanger provides maximum heat per pound of fuel.

The ducted return air system is relatively new to the motor home industry and does a great deal to enhance the ability to heat the vehicle and to provide more even distribution.

A forced warm air duct is provided in the bath module with the outlet being a high quality manually operated aircraft type.

The lighting area features new overhead lamps with aluminum extrusion bases instead of plastic, to provide better lens retention.
A double lamp has been installed over the galley for better lighting.

Other important lighting changes include cooler operating floor lamps with front replaceable bulbs, and bath lamps of higher intensity for increased illumination.

Even the switches offer new features. The bath lamps are separately controlled and the L.P. gas and motor generator compartment lamp switches are totally sealed. The galley lamp can be controlled at the lamp or with a separate switch.

The motor generator start-stop switch also incorporates the long awaited hour meter. No longer will motor generator maintenance schedules be done by guess work.

Other electrical improvements have been made in the 12 volt wiring. All the new connectors feature a "mate or reject" function, and the harness is totally enclosed in a flexible conduit.

A new design fuse block with stronger fuse clips replaces previously soldered connections.

Fuses are now all the same size, of 15 ampere rating.
The power cord storage box now has a drain and improved sealing. Access to the power cord has also been improved.

High quality Hammond vents with double crank, fully adjustable covers are standard equipment. The new vents have positive opening and closing, which will eliminate chatter.

The bath module has a ceiling mounted powered vent as standard equipment.
A Duo-Therm 13,500 Btu air conditioner has been released for the Eleganza II vehicles.

This concludes our preview of the many new features of the latest GMC Motor Home — Eleganza II.