



Southern Illinois Corn Field

Al Richardson

The **LUFKIN** Line

WINTER, 1981

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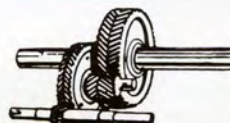


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CHICAGO AREA

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COVERS

Front:
Southern Illinois Corn Field
Painting by Al Richardson,
Bellaire, Texas

Inside Front:
A Rare Snowy Morning in East Texas
Photo by Tom Johnston,
LUFKIN photographer

A limited number of framing reproductions of the painting, Southern Illinois Corn Field, is available. Requests should be made to the Director, Public Relations, P. O. Box 849, Lufkin, Texas 75901.



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The House On The Rock is situated on a 60-foot chimney rock countryside overlooking the Wyoming Valley 450 feet below.

The House On The Rock

One man's dream has become a fascinating and unique creation

By Janice Aston

If you drive west from Madison for about an hour, you will come upon some of the most beautiful farmland in Southern Wisconsin. The valleys are broad and fertile. Except for an occasional tractor or bellowing milk cow, the only sound is the breeze. From the hilltops, you can look across a patchwork countryside which is interrupted here and there by groves of hardwoods.

It is in this lovely setting, near the town of Dodgeville, that you will come upon a fascinating and absolutely unique creation of man and nature called The House On The Rock.

It is the masterwork of one man's prolific imagination and massive energy — sculptor, architect, builder, imaginer Alex Jordan.

Forty years ago, when the Madison artisan first viewed the plot of hilly farmland on which The House On The Rock now stands, his eye was drawn to a curious rock outcropping jutting skyward. When he scrambled to the summit of Deershelter Rock to behold the vistas of the Wyoming Valley, Jordan saw wonderful possibilities for the lofty terrace. This would be the ideal location for his country retreat — here he could create — here he could live.

With nature guiding his design, Jordan began to integrate the construction of his studio with the patterns and contours of the rock. His idea was to create a structure which seemed to spring from the rock, yet imposed upon it the order and simplicity of architectural design.

At first the building was to remain a simple studio — a place for an artist to work in solitude — a sanctuary from Wisconsin winters and Madison's city life.

But Jordan, always the creator, felt compelled to expand his haven. In seven years, Jordan built on the original room seven times. As people began to wonder what the energetic man on the rock was doing, the



Throughout The House are erratic contours of rock that create fascinating nooks and crannies, niches and crags, pits and pools.

builder replaced ladders and pathways with a stairway for the curious. The House On The Rock grew to be the talk of the region.

Then Jordan began to decorate The House. He filled the rooms with exotic, rare and antique objects of all forms and functions. He brought in strange and wonderful pieces of art, old machines, mysterious religious icons and stuffed animals. The House On The Rock was readied to meet an inquisitive and delighted public.

Today, there are 13 rooms in The House, each more dazzling than the other. Each follows the natural contours of the rock, forming erratic patterns, intriguing nooks and crannies, pits and pools, niches and crags. Even nature is regarded as a

pure and compatible art form. Many trees flourish unimpeded by their novel surroundings. They grow right through The House on the Rock, and soar out open skylights.

You are welcomed to The House through the gate house. Built after the original studio at a lower level, the room prepares you for experiencing Jordan's fantasy creation. The corridors are walled with natural rock and carpeted in thick cream pile. The low ceiling gives the den a modern appearance, in contrast to the rustic charm of the huge fireplace — the first of many fireplaces you encounter as you tour The House On The Rock.

Connecting the lower and upper portions of The House is an architectural delight called the flying bridge.

Photos by LUFKIN Photographer, David Freeze



Authentic reproductions of shops, offices, municipal buildings and homes line The Streets of Yesterday. Photo by Sidney Boyum.

Through its canted windows with thousands of individual window panes, you look out and down to the forest below.

You enter an environment of subdued light and softened tones. At the end of the living room is a small pool of water reflecting the foliage and rock garden arrangements on its banks. A life-size sculpture of saint and children sits alone in a rocky grotto, while a concert grand piano stands in lovely contrast to the natural stone walls. Leatherbound volumes of books share shelves with precious objects d'arts.

Corridors and stairways twist along the contours of the rocky support. Through the promenade approach, you come upon the cedar room. The live cedars, down-birch rail, boulders and timbers give the impression of a cool forest floor. But you are still inside.

The House is like a delightful maze. The self-guided tour format allows you to explore and discover wonders for yourself. Every turn greets you with the unexpected.

Leaving the main part of The House, you find that the buildings are drawn together by a series of passages and walks which are punctuated with water ponds, outdoor sculptures, willow trees and Oriental decoration.

Next on your journey is the mill house with its characteristic water wheel. Here is placed yet another fireplace, this one patterned after a Scottish castle. Behind the mill house fire pit is a secret room, a sanctuary like those once used to harbor political prisoners.

In the mill room, Alex Jordan has carried the zeal of the collector to its furthest extreme. A selection of paper weights made from precious and sparkling gems are encased in a display made from a giant see-through blacksmith's bellows. A wealth of weaponry is featured — suits of armor, cross-bows and broadswords, and a collection of guns ranging from derringers to Kentucky long rifles.

You also encounter the first of Jordan's magnificent music machines in the mill house. The hupfeld Violin Machine is representative of the pre-

phonograph music machines that once were extremely popular in Europe. Quick reels and fiddle tunes still ring out from the turn-of-the-century machine.

The Streets of Yesterday display, a charming reproduction of streets from the 1880's circa, is next on your tour. Strolling by the old Apothecary Shop, Grandma's House or any of the delightful settings of the past, you get the feeling that the streets may come alive before your very eyes. Street lights wink and blink as the calliope — another of Jordan's music makers — plays its merry tunes.

Within earshot of the great calliope is Esmerelda, the gypsy fortune teller who reads her cards and provides insight into the lives of those who give her a coin. In front of the hotel is the ever popular peanut and popcorn vending wagon, where the entrance to The Music of Yesterday display presents the magnificent machines of a magnificent era.

The decor of this section is influenced by the atmosphere of old New Orleans. You enter through a

foyer ablaze with lights to marvel over an amazing array of musical machines and entertaining entities. In the lobby, a seated statue of Pan seems to accompany The Music of Yesterday's ornate piano player.

The parlor pipe organ of mythical pianist Kitty DuBois is displayed in an elegant room with a tufted velvet ceiling, and an ornate brass bed. The Silk Purse Coffee House offers you the finest espresso and royales. An old horse-drawn hearse adorned with endless statues has an organ that plays dirges and ditties. Opposite it is the Peacock, a mechanically operated Mortier orchestrion with four accordians, percussion, saxophones, organ pipes and much more. A remarkable butterfly collection leads the way to the Blue Room.

The fantastic Blue Room is a room of totally overwhelming elegance, housing the only mechanically operated symphony orchestra of its kind. Here, in the setting of a baroque music chamber, is an arrangement of instruments in concert formation that is a novel departure from traditional music machines. The primary sound emanates from pipes which produce the sounds of strings and horns. Only the percussion instruments that you see actually play. Movement of the bows and fingering of devices are strictly for illusion.

The Red Room is next with its regal atmosphere and elegance. It, too, features a mechanically operated orchestra.

This season, visitors to The House On The Rock witnessed the unveiling of Alex Jordan's latest and, perhaps, most extravagant creation for The House On The Rock. The world's greatest carousel, measuring 80-feet in diameter, carries 150 life-size or larger carousel animals, and dazzles the eye with some 16,000 light bulbs. To magnify the impact of the lights, Jordan installed a half circle of mirrors around the carousel, and to complete the picture, an enormous band organ accompanies the carousel.

The design for the carousel, like all of Jordan's displays for The House, was purely a product of his imagination. Workman used no blueprints to assemble the display — only the artist's instructions. It took more than two and a half years to assemble the largest and finest in the world's history of carousels.

The House On The Rock has become one of the top tourist attractions in the midwest, but to its thousands of visitors each year, its



The fantastic Blue Room offers a different and deceptive innovation—the maestro of this symphony orchestra is a meticulously punched tape.



The newest exhibit of The House On The Rock is the "Stradivarius of Carousels!" Some of the 150 antique animals featured on the carousel are valued at \$20,000 a piece.

creator remains a mystery. Alex Jordan has returned to Madison to live, and at 65 years of age steadfastly refuses to "go public." If it is difficult to believe that after seeing his famous House, he never formally studied architecture. However, he was — and is — a gifted sculptor.

As you visit each room of The

House On The Rock, you cannot help but wonder about the man behind it all. What were his feelings? What were his reasons for building this fascinating marvel? No one knows. You can only conjecture what drove this man to produce one of the most unusual, strange and breathtakingly beautiful structures ever seen.

LUFKIN Installations



The "Conti-Betty Lynn" (above) is powered by two EMD engines rated at 3,070 BHP at 900 RPM through two LUFKIN RHS3622 Reverse Reduction Marine Gears.



Four LUFKIN N440C Gear Reducers with four LUFKIN DF1070C Double Reduction Gears are driving a FULTON three-roll sugar mill at Ingenio Puga, Mexico.



These two single-stage Allis-Chalmers centrifugal compressors are installed in a southeastern sewage plant and used in an aeration process. They are driven by an induction motor rated at 1,300 HP through a LUFKIN N1002C Gear Increaser at 5,650 RPM.



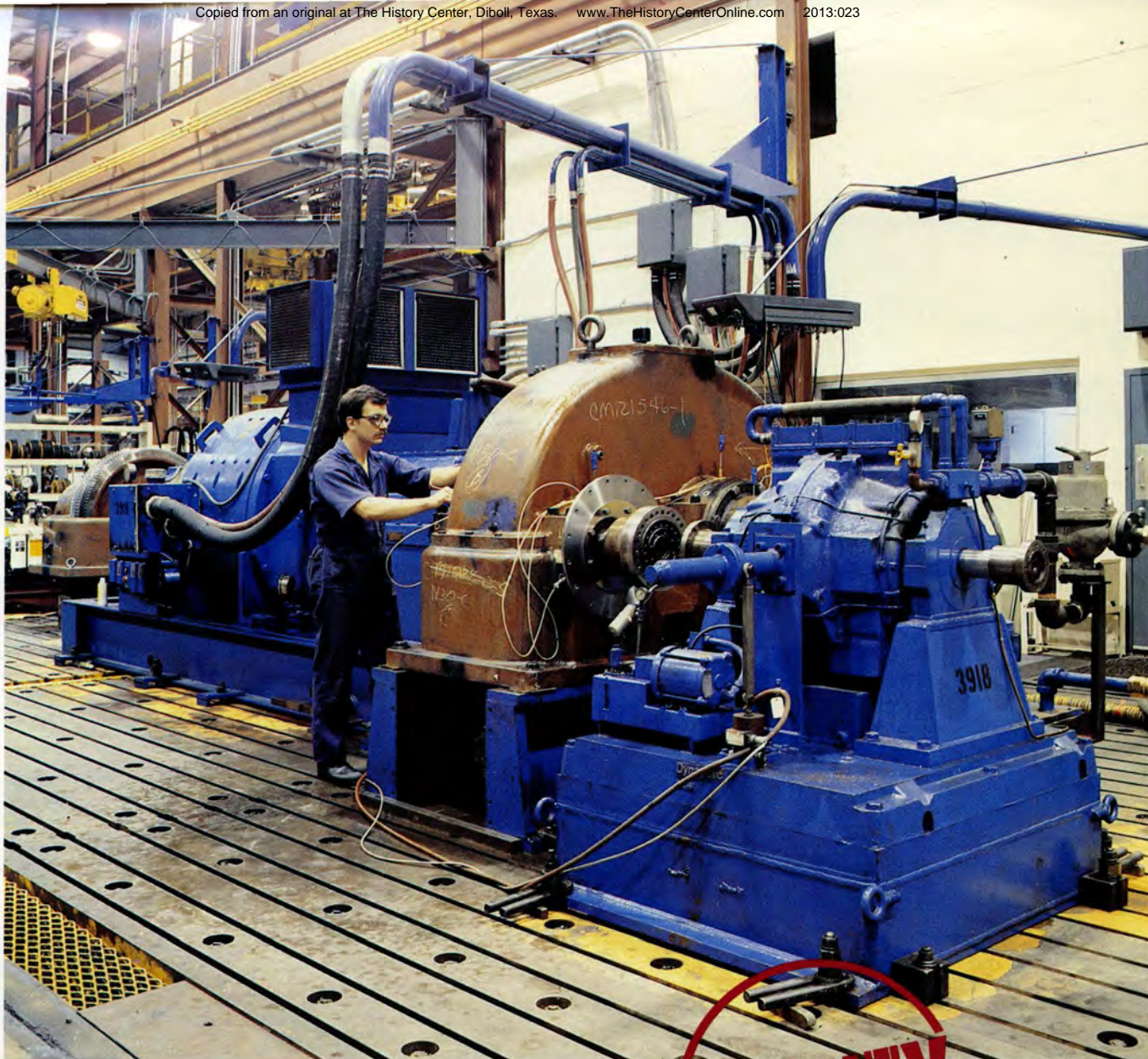
This multistage barrel-type compressor is driven at 10,700 RPM through a LUFKIN N1800C Gear Increaser by a 2,400 HP motor. The unit recycles hydrogen in a petroleum refinery.



LUFKIN M-456D-305-144 Unit, Texaco Inc., Salem, Illinois



A LUFKIN N1003C Gear Reducer is part of a Trane Murray TMD Turbogenerator installation in a Gin near Bakersfield, California.



The Test of **QUALITY**

Gear expansion features one of the finest test facilities in the industry

By Janice Aston

One of the major highlights of the recently completed gear manufacturing complex at Lufkin Industries is a new testing facility for enclosed gearing. Proper gear testing assures LUFKIN customers of the highest quality gear with a long trouble-free life.

The testing area is located in the center of the new 57,600 square-foot gear building. The expansion represents a \$7.5 million commitment by the company to industrial and marine gear manufacturing. The gear manufacturing line has been

separated from pumping unit production, improving productivity and scheduling. The installation of \$5 million in production machinery allows the company to offer heavy, low-speed gearing and precision, high-speed gearing at lower costs.

All LUFKIN gear units are tested, and the testing facility has doubled in size to meet production demands. It features both a test area for low-speed and high-speed gearing. The low-speed area offers an enlarged and cleaner testing environment, while company officials are calling the high-

speed testing area "the finest in the industry."

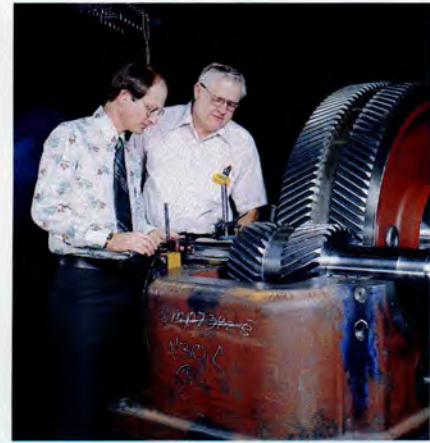
The high-speed gearing area is dominated by an 800 horsepower variable speed motor used to drive the tested gear units. The motor has double output shafts (one on each end) which allows one test to be run while another is set up. It drives a two-stage gear unit on one end and a single stage gear unit on the other. Using this drive arrangement, gear units can be tested with an input drive speed in the range of 200 RPM to 20,000 RPM.



(Opposite page) The new testing facility for enclosed gearing was part of the recent gear expansion at Lufkin Industries. It features testing areas for both high-speed and low-speed precision gearing. (Above) The test panel was designed to provide data display, data recording, control of test parameters and instrumentation for diagnostics of gear quality problems. Pictured is technician Clarence Miller.

A dynamometer can be attached to the output shaft of the tested gear unit and a load of up to 600 horsepower can be applied. The use of slave gearing between the tested unit and the dynamometer allows the company to test a unit with an output speed range of 500 RPM to 10,000 RPM. If two gear units are tested simultaneously, a four-square or locked-torque test can be performed on units transmitting up to 20,000 horsepower. The test facility also features a built-in lubrication system which supplies up to 200 gallons of oil per minute to the tested unit. Extensive alarm and shutdown switches are utilized to insure that no damage comes to the test gear unit in the event of a lubrication oil failure.

Measuring instruments are attached to the gear unit, and the signals from these devices are fed into the instrumentation room. Two instrument booms located on the test floor allow for quick installation and wiring of measuring instruments. The instrumentation room located adjacent to the test stand allows the operator to clearly see the unit, and a steel plate and bullet-proof glass protects him from any mishap which could occur on the test floor. Here, he monitors and records the operating temperatures of bearings and the inlet and outlet temperature of the oil. Vibration levels of the gear housing and shafts are measured, and noise levels are determined. A small separate room is available



LUFKIN employees Louis Lloyd, project engineer, and Leonard Avery, manager of the gear test and service department, inspect the vibration probe shaft area of a LUFKIN N3004C Gear Reducer for electrical and mechanical run-out.



Technician Clarence Miller performs a load test on a LUFKIN N1604 Gear Increaser, a unit designed to transmit 1,750 horsepower from an electric motor to 1,750 RPM to a centrifugal compressor at 8,986 RPM.

for use by customer inspectors. The gear service department is located in this same area, and its personnel can offer timely assistance to test stand operators. The company's primary goal when planning the new testing facility was to develop an enclosed gear testing area that could perform even the most complicated high-speed precision gearing tests. Test results can be documented to meet American Petroleum Institute standards or the strictest customer specifications. As Lufkin Industries furthers its commitment to the gear industry, offering the most reliable and accurate gear product on the market, the new testing facility will provide the final test of quality.

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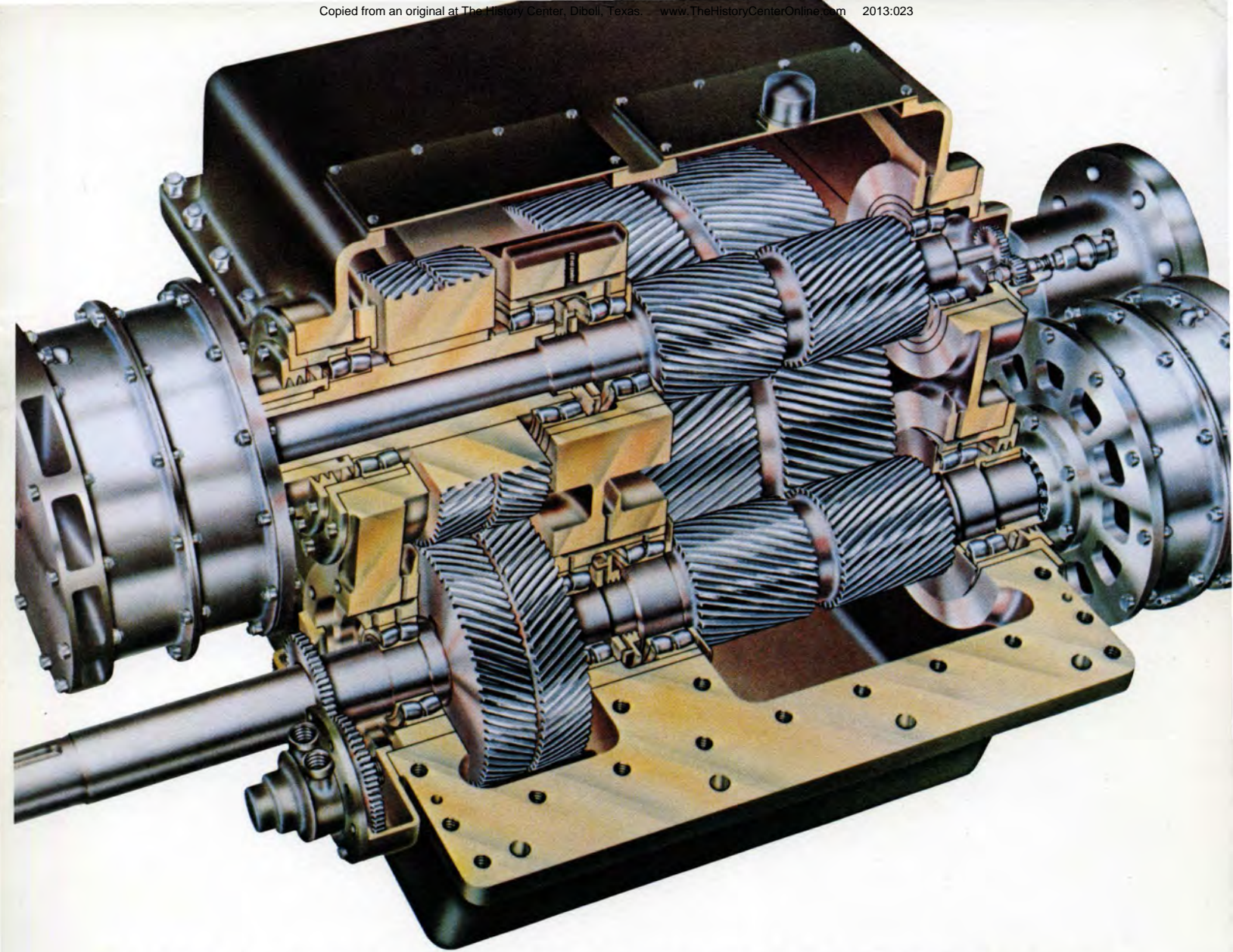


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